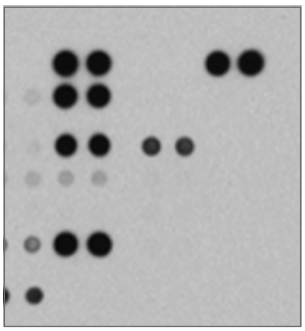
bio-techne®

Signal Transduction
Discover. Optimize. Verify.

Discover

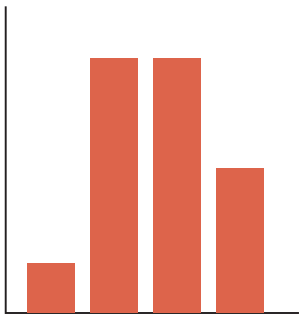
> Antibody Arrays

> Small Molecule Libraries



Optimize

> ELISAs



Verify

> Antibodies

Quick Guide

Discover

Optimize

Verify

Product Listings

Discover What You Might Be Missing

Unexpected, interesting results can be missed when only a subset of proteins within a given family or signaling pathway is analyzed using standard Western blots. Proteome Profiler™ Antibody Arrays allow you to analyze the expression levels or phosphorylation status of many proteins simultaneously, an approach that could increase your chances of discovering a novel pathway or cellular response.

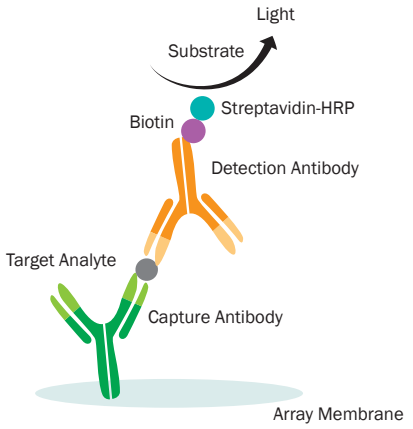
Proteome Profiler™ Antibody Arrays

Proteome Profiler membrane-based antibody arrays consist of capture antibodies specific for up to 119 analytes spotted in duplicate on a nitrocellulose membrane. Each array is designed to analyze a particular protein family or cellular process. Comprehensive in scope, the data generated from each of these arrays can uncover unexpected cellular responses, such as crosstalk between signaling pathways or off-target pharmacological effects. The arrays also eliminate the time-consuming steps of gel electrophoresis and protein transfer that are necessary when performing a Western blot. In addition, the arrays require no specialized equipment. If you can collect data from a Western blot, you have the equipment to run a membrane-based array experiment.

Features

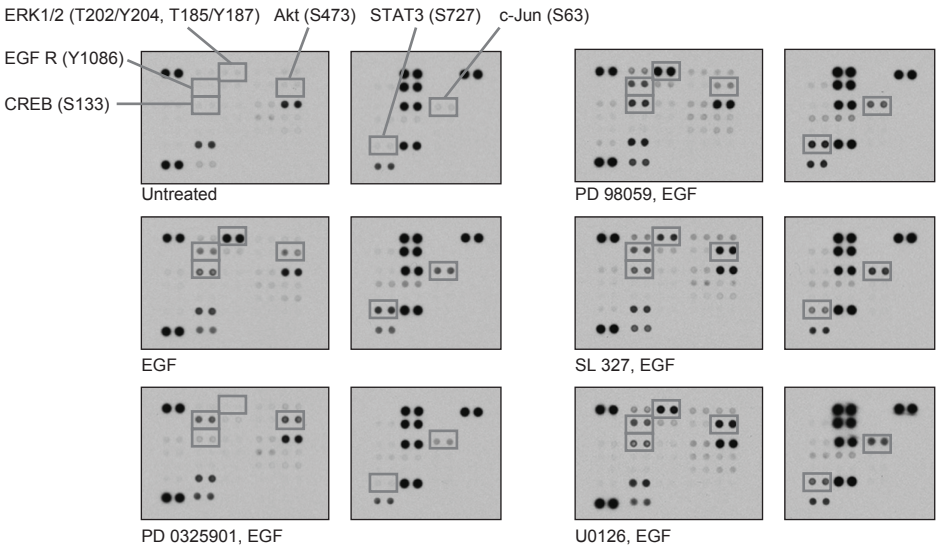
- Hundreds of citations in primary literature
- Ideal for visualizing signaling crosstalk
- Easier to perform than a Western blot
- Hands-on time of 3 hours

Assay Principle

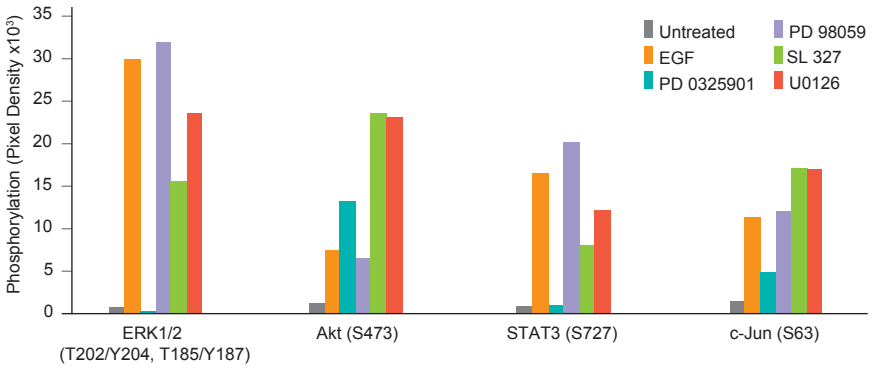


Membrane-based Antibody Array Assay Principle. Antibodies immobilized on nitrocellulose membranes are used to capture specific proteins from cell lysates. Target proteins are detected using a cocktail of biotinylated detection antibodies and Streptavidin-HRP, or an HRP-conjugated pan anti-Phospho-Tyrosine antibody. Bound analytes are visualized with chemiluminescence.

A.



B.



Induction and Inhibition of Kinase Phosphorylation in T47D Cells. The T47D human breast cancer cell line was untreated, treated with 100 ng/mL Recombinant Human EGF (R&D Systems; Catalog # 236-EG) for 15 minutes, or EGF following a 2 hour pretreatment with the MEK inhibitors PD 0325901 (10 µM; Tocris; Catalog # 4192), PD 98059 (20 µM; Tocris; Catalog #1213), SL 327 (10 µM; Tocris; Catalog # 1969), or U0126 (10 µM; Tocris; Catalog # 1144). The phosphorylation status was determined using the Proteome Profiler Human Phospho-Kinase Array (R&D Systems; Catalog # ARY003B). Membranes were exposed to X-ray film (**A**) and histograms were generated from pixel density measurements (**B**).

Tocriscreen™

Tocriscreen collections are unique small molecule libraries, designed for screening based on chemical genetics, chemical biology, receptor de-orphaning, target validation, or drug re-profiling. Comprised of biologically active compounds selected from the Tocris catalog, Tocriscreen collections provide wide coverage of the most important targets covered in biochemical and cellular screening assays. Used in both high-throughput and high content screening, Tocriscreen collections provide an indispensable starting point for modern drug discovery.

The libraries are available pre-dissolved in DMSO, and include compounds targeting GPCRs, kinases, ion channels, nuclear receptors, transporters and stem cell biology. Many of the compounds are unavailable elsewhere.

Features

- All compounds are biologically active
- Full chemical and biological data available
- Many compounds are unique to Tocris
- Exceptional purity
- Guaranteed resupply of compounds

Tocriscreen™ Featured Collections

Tocriscreen Total (Tocris; Catalog # 2884)
1120 biologically active compounds pre-dissolved in DMSO (250 µL 10 mM solutions)
Includes compounds targeting 5-HT, glutamate, acetylcholine, and adrenergic receptors; inhibitors of PDE, PKC, and ROCK; and a number of ion channel blockers.
Tocriscreen Mini (Tocris; Catalog # 2890)
1120 biologically active compounds pre-dissolved in DMSO (50 µL 10 mM solutions)
The same high quality compounds as the Tocriscreen Total, in smaller volumes.
Tocriscreen Kinase Inhibitor Toolbox (Tocris; Catalog # 3514)
80 Kinase inhibitors supplied pre-dissolved in DMSO (250 µL 10 mM solutions)
Includes the kinase inhibitors U0126 (Catalog # 1144) and PD 98059 (Catalog # 1213).
Tocriscreen Stem Cell Toolbox (Tocris; Catalog # 5060)
80 stem cell modulators supplied pre-dissolved in DMSO (250 µL 10 mM solutions)
Includes the stem cell compounds DAPT (Catalog # 2634), Y-27632 (Catalog # 1254), SB 431542 (Catalog # 1614) and CHIR 99021 (Catalog # 4423).
Tocriscreen Epigenetics Toolbox (Tocris; Catalog # 5268) New
80 epigenetic modulators supplied pre-dissolved in DMSO (250 µL 10 mM solutions)
Includes the epigenetics compounds (+)-JQ1 (Catalog # 4499), A 366 (Catalog # 5163) and JIB 04 (Catalog # 4972).

Citations

1. Beacham, D.W. *et al.* (2010) Cell-based potassium ion channel screening using the FluxORTM assay. J. Biomol. Screen. **15**:441-6.
2. Hattori, H. *et al.* (2010) Small-molecule screen identifies reactive oxygen species as key regulators of neutrophil chemotaxis. Proc. Natl. Acad. Sci. USA **107**:3546-51.
3. Li, Y. *et al.* (2011) Generation of iPSCs from mouse fibroblasts with a single gene, Oct4, and small molecules. Cell Res. **21**:196-204.
4. Jester, B.W. *et al.* (2010) A coiled-coil enabled split-luciferase three-hybrid system: applied toward profiling inhibitors of protein kinases. J. Am. Chem. Soc. **132**:11727-35.
5. Moujalled, D. *et al.* (2013) Kinase inhibitor screening identifies cyclin-dependent kinases and glycogen synthase kinase 3 as potential modulators of TDP-43 cytosolic accumulation during cell stress. PLoS One **8**:e67433.
6. Edwards, B.S. *et al.* (2014) The University of New Mexico Center for Molecular Discovery. Comb. Chem. High Throughput Screen. **17**:256-65.

Optimize Experimental Conditions Faster with ELISAs

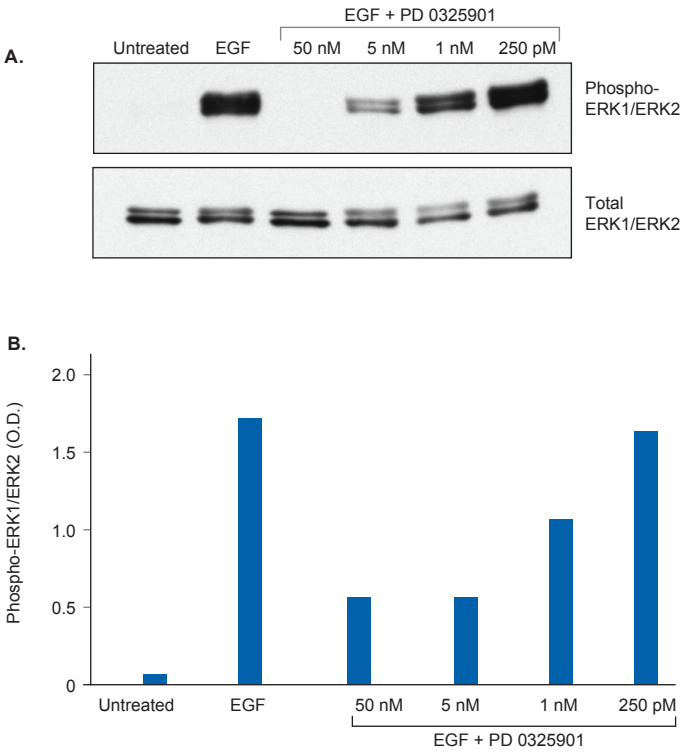
The Surveyor™ IC (Intracellular) ELISA Kits, DuoSet® IC ELISA Development Systems, and Cell-Based ELISA Kits each provide as much data as do approximately eight individual Western blots. More important, the data obtained from our ELISA assays exhibit excellent correlation with results from Western blots performed in parallel. These ELISA-based formats provide a more efficient way to optimize your experimental conditions and clarify the best way forward.

DuoSet® IC ELISA Development Systems

DuoSet IC ELISA Development Systems offer an economical alternative to complete Surveyor IC ELISA Kits. They contain the components required for developing an assay, including capture and detection antibodies, protein standard or control, and Streptavidin-HRP. Each DuoSet IC ELISA Development System undergoes an extensive validation process to ensure specificity, minimizing the time required to perform a successful assay.

Features

- High sensitivity – requires small sample volume
- Economical
- Flexible format
- Quantitative without image software analysis
- Adaptable to high-throughput applications



Quantification of Phospho-ERK1/ERK2 in T47D Cells. The T47D human breast cancer cell line was treated with the indicated concentrations of PD 0325901 (Tocris; Catalog # 4192) for 2 hours, followed by treatment with 100 ng/mL Recombinant Human EGF (R&D Systems; Catalog # 236-EG) for 5 minutes. The levels of phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) were detected by Western blot (**A**) and quantified using the Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) DuoSet IC ELISA Development System (R&D Systems; Catalog # DYC1018B) (**B**).

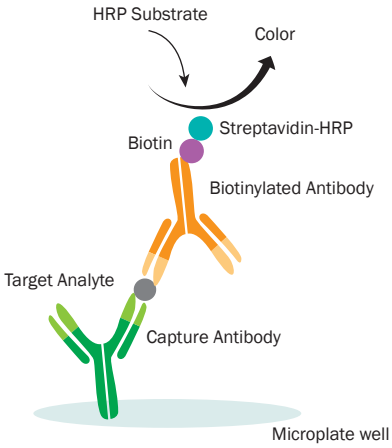
Surveyor™ IC ELISA Kits

Complete kits using a 96-well microplate format, Surveyor IC ELISAs provide all the components necessary for measuring the levels of total or phosphorylated proteins. Protein levels are easily quantified using the calibrated standard included in each kit, and the sensitivity of the assay permits the use of small sample volumes.

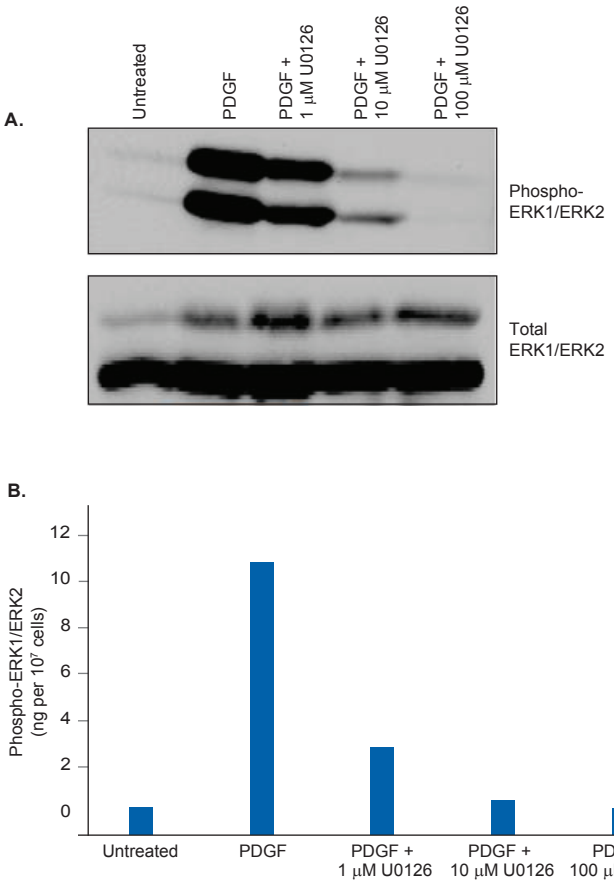
Features

- Fully validated, complete kits
- High sensitivity – requires small sample volume
- Quantitative without image software analysis
- Adaptable to high-throughput applications

Assay Principle



Sandwich Immunoassay Principle. An immobilized antibody specific for the protein of interest is used to capture the protein from cell lysates. After unbound materials are washed away, a biotinylated detection antibody and Streptavidin-HRP are used to quantify the capture protein.



Quantification of Phospho-ERK1/ERK2 in NIH-3T3 Cells. NIH-3T3 mouse embryonic fibroblast cells were treated with 100 ng/mL of Human PDGF (R&D Systems; Catalog # 120-HD) for ten minutes, with or without U0126 (Tocris; Catalog # 1144). The levels of phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) were detected by Western blot (**A**) and quantified using the Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) Surveyor IC Kit (R&D Systems; Catalog # SUV1018B) (**B**).

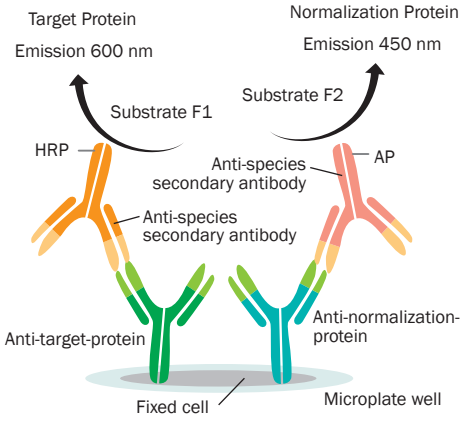
Cell-Based ELISA Kits

Cell-Based ELISAs are complete kits that permit the simultaneous detection of two proteins in the same microplate well without requiring lysate preparation. These kits come in two formats. Phospho-protein kits contain antibodies to measure both the phosphorylated and the total protein, while total protein kits contain antibodies to both the protein of interest and a housekeeping protein. Both formats allow for the normalization of the target protein in each well to account for well-to-well variation.

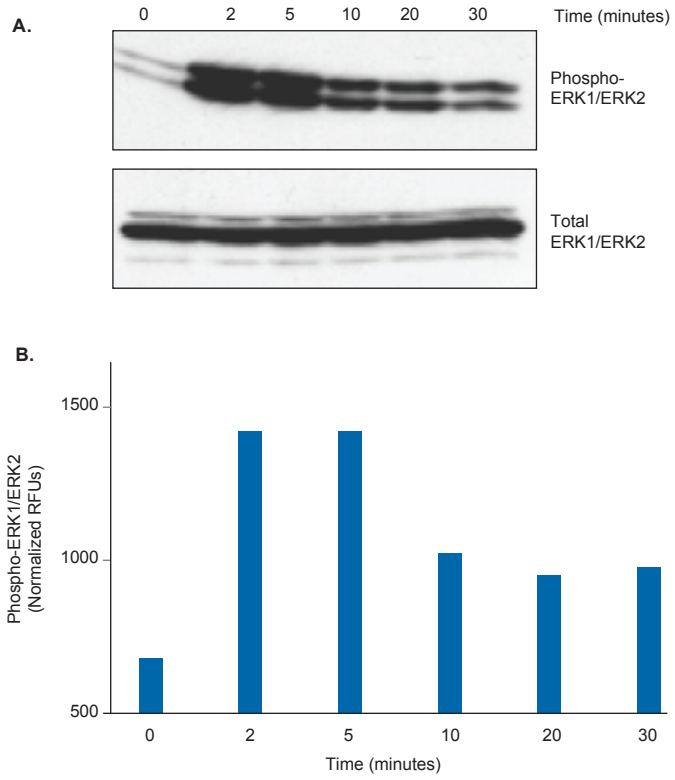
Features

- Obtain data from intact cells
- Utilize with either adherent or suspension cells
- Measure the levels of phosphorylated and total protein simultaneously in the same well
- Culture cells and perform the assay in the same well
- Begin with as few as 10,000 cells per well

Assay Principle



Cell-Based ELISA Assay Principle. Cells are treated, fixed, permeabilized, and subsequently incubated with two primary antibodies derived from different species. One is specific for the target protein and one serves as a normalization antibody. Two species-specific secondary antibodies labeled with either horseradish peroxidase (HRP) or alkaline phosphatase (AP), and two spectrally distinct fluorogenic substrates for HRP and AP are used to detect both proteins in the same well. Normalizing the fluorescence signal derived from the target protein to that of the normalization protein makes it easy to account for well-to-well variation.



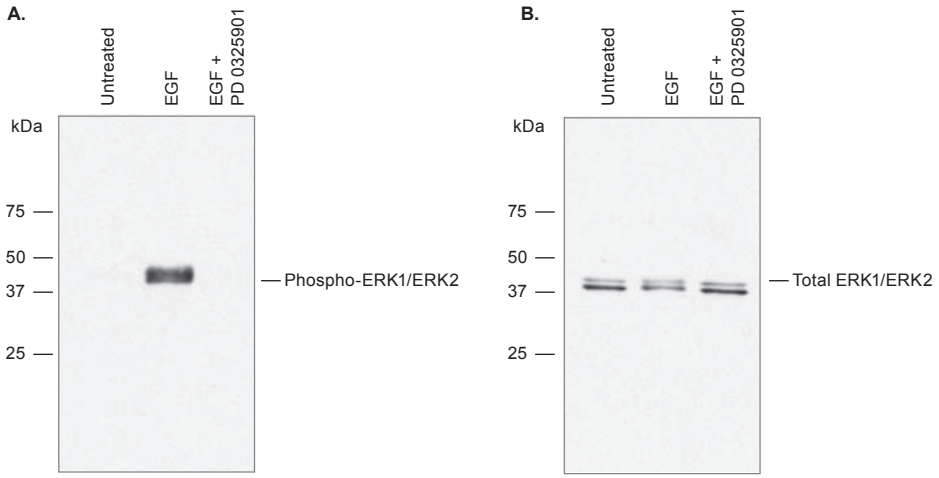
Measurement of Phospho-ERK1/ERK2 in A431 Cells. A431 human epithelial carcinoma cells were treated with Recombinant Human EGF (R&D Systems; Catalog # 236-EG) for the indicated times. Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) and total ERK1/ERK2 levels were detected by Western blot (**A**) and, after fixation of cells in the wells, phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) levels were determined and normalized to total ERK1/ERK2 levels in the same well using the Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) Cell-Based ELISA Kit (R&D Systems; Catalog # KCB1018) (**B**).

Verify Results with High-Performance Antibodies

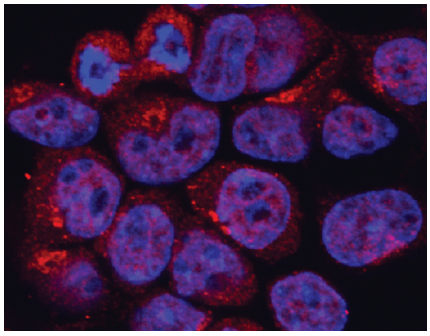
With our selection of over 155,000 Novus Biologicals® and R&D Systems® antibodies, you will be able to find what you need. Additionally, because our antibodies are 100% guaranteed to work in the application and species listed you can always be confident in what you find.

Features

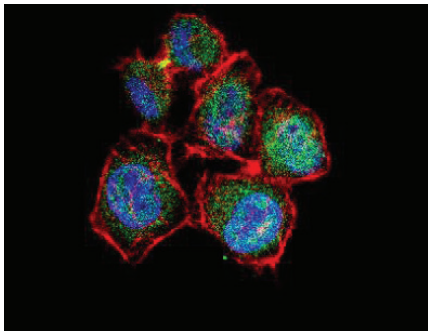
- Largest offering on the market
- Hundreds of unique clones developed in-house
- Over 15,000 antibodies specific for unique target molecules
- Over 200,000 data images and 2,000 customer reviews
- Over 50,000 conjugated primaries to 3,000 unique target molecules



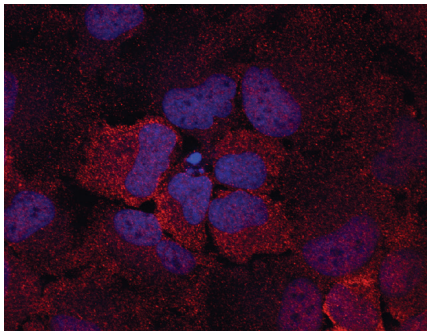
Inhibition of ERK1/ERK2 Phosphorylation in T47D Cells. The T47D human breast cancer cell line was treated with PD 0325901 (50 nM; Tocris; Catalog # 4192) for 2 hours, followed by treatment with 100 ng/mL Recombinant Human EGF (R&D Systems; Catalog # 236-EG) for 5 minutes. The levels of phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) (**A**) and total ERK1/ERK2 (**B**) were detected by Western blot using the Anti-Human/Mouse/Rat Phospho-ERK1 (T202/Y204)/ERK2 (T185/Y187) Affinity-Purified Polyclonal Antibody (R&D Systems; Catalog # AF1018) and the Anti-Human/Mouse/Rat ERK1/ERK2 Monoclonal Antibody (R&D Systems; Catalog # MAB15761), respectively.



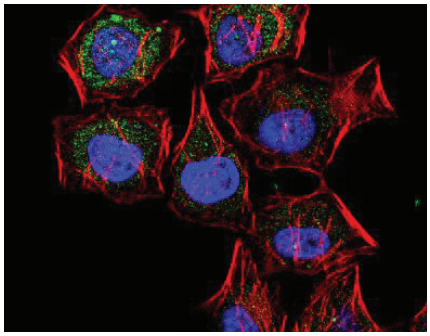
MEKK2 in 293T Cells. MEKK2 was detected in immersion fixed 293T human embryonic kidney cells using a Mouse Anti-Human/Mouse/Rat MEKK2 Monoclonal Antibody (Catalog # MAB7128). Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). *All cited reagents are from R&D Systems.*



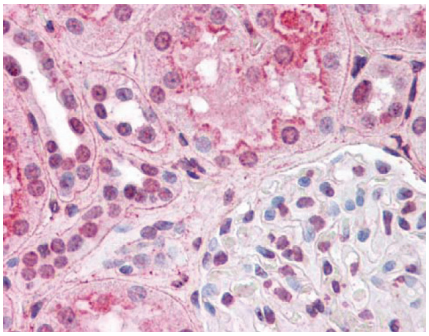
Survivin in HeLa Cells. Survivin was detected in HeLa cells using a Rabbit Anti-Human/Mouse/Rat/Canine/Feline/Guinea Pig/Hamster Survivin Antibody (Novus Biologicals; Catalog # NB500-201). Cells were stained using an Alexa Fluor® 488-conjugated goat anti-rabbit IgG secondary antibody (green). Actin filaments were labeled with Alexa Fluor 568 phalloidin (red). The nuclei were counterstained with DAPI (blue).



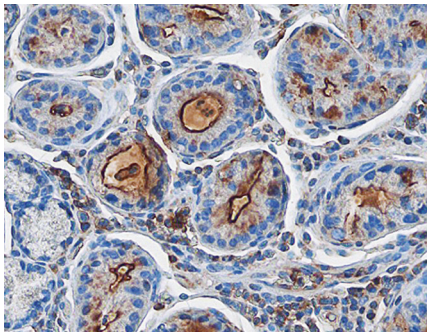
TSC2 in HeLa Human Cell Line. TSC2 was detected in immersion fixed HeLa human cervical epithelial carcinoma cells using a Human TSC2 Monoclonal Antibody (Catalog # MAB40401). Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to the cytoplasm. *All cited reagents are from R&D Systems.*



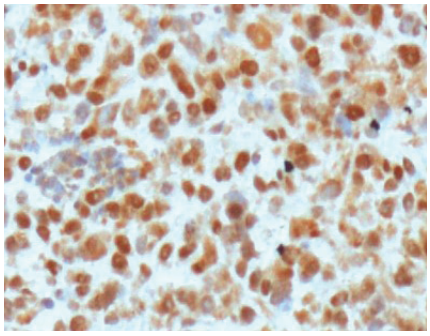
LC3B in HeLa Cells. LC3B was detected in HeLa cells using a Rabbit Anti-Human/Mouse/Rat/Bovine/Canine/Primate/Zebrafish LC3B Antigen Affinity-Purified Polyclonal Antibody (Novus Biologicals; Catalog # NB600-1384). Cells were stained using an Alexa Fluor 488-conjugated goat anti-rabbit IgG secondary antibody (green). Actin filaments were labeled with Alexa Fluor 568 phalloidin (red). The nuclei were counterstained with DAPI (blue).



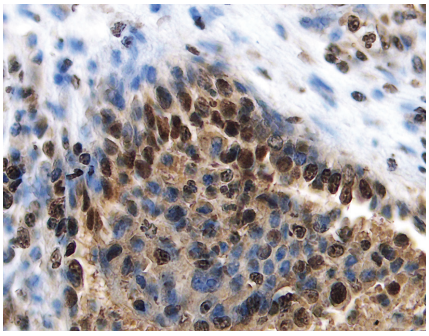
HIF-1α in Human Kidney. HIF-1α was detected in human kidney tissue using a Mouse Anti-Human/Mouse/Rat/Bovine/Ferret/Porcine/Primate/Rabbit/Sheep/Xenopus/Yeast HIF-1α Monoclonal Antibody (Novus Biologicals; Catalog # NB100-105). The renal tubular epithelium showed moderate membranous, cytoplasmic and nuclear staining, and glomeruli showed faint to moderate nuclear staining.



Gastrokine 1 in Human Stomach. Gastrokine 1 was detected in immersion fixed paraffin-embedded sections of human stomach using Sheep Anti-Mouse Gastrokine 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7287). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to islets. *All cited reagents are from R&D Systems.*



APE1 in Human Breast Cancer Xenograft Tissue. APE1 was detected in human breast cancer xenograft tissue using a Mouse Anti-Human/Mouse/Rat/Primate APE1 Monoclonal Antibody (Novus Biologicals; Catalog # NB100-116). The tissue was stained with DAB (brown) and counterstained with hematoxylin (blue).



Histone H2AX in Human Breast Cancer Tissue. Histone H2AX was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using a Human Phospho-Histone H2AX (S139) Antigen Affinity-Purified Polyclonal Antibody (Catalog # AF2288. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). *All cited reagents are from R&D Systems.*

Verify Simple Western™ and Certified Antibodies

A Simple Western™ is the Western you know well, only simplified. It's not a workaround, a stab at automating the traditional process, a Western-like substitute, or a partial solution. It's the real thing, completely reinvented.

Benefits

- Alternative to Western blot and total protein analysis
- Size- and charge-based immunoassays
- Quantitative protein characterization
- Protein analysis in precious samples

Simple Western™ Instruments

Wes

Size assays on up to 25 samples in 3 hours

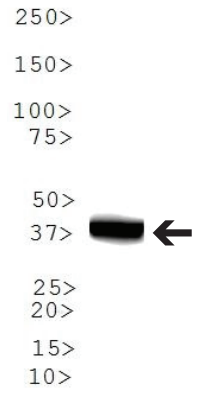
Sally Sue

Size assays on up to 96 samples

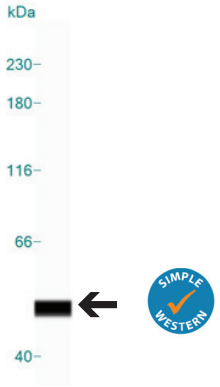
Peggy Sue

Size and charge assays on up to 96 samples

Traditional Western



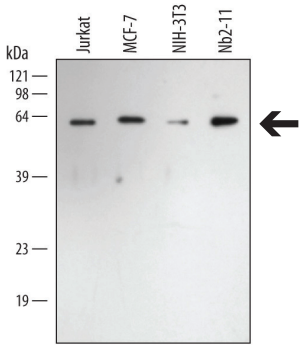
Simple Western



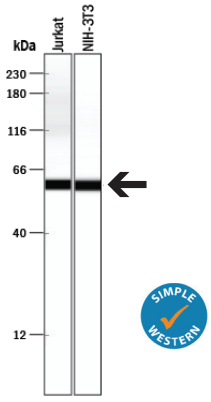
Detection of Human Cytokeratin 19 by Western blot. Western blot shows detection of Cytokeratin 19 in untreated MCF-7 Lysate. The nitrocellulose membrane was probed with a Rabbit Anti-Human/Cytokeratin 19 Polyclonal Antibody (Catalog # NBP1-78278, Novus Biologicals). A specific band was detected for Cytokeratin 19 at approximately 40 kDa (as indicated).

Detection of Human Cytokeratin 19 by Simple Western. Simple Western lane view shows a specific band between 40-45 kDa for Cytokeratin 19 tested in 0.05 mg/mL of untreated MCF-7 Lysate using a Rabbit Anti-Human/Cytokeratin 19 Antibody (Catalog # NBP1-78278, Novus Biologicals). This experiment was performed under reducing conditions using the 12-230 kDa separation system.

Traditional Western



Simple Western



Detection of Human/Mouse/Rat HSP60 by Western blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, MCF 7 human breast cancer cell line, NIH 3T3 mouse embryonic fibroblast cell line, and Nb2 11 rat lymphoma cell line. PVDF membrane was probed with 0.1 µg/mL of Human/Mouse/Rat HSP60 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1800) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008, R&D Systems). A specific band was detected for HSP60 at approximately 62 kDa (as indicated).

Detection of Human and Rat HSP60 by Simple Western. Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line and NIH 3T3 mouse embryonic fibroblast cell line, loaded at 0.2 mg/mL. A specific band was detected for HSP60 at approximately 60 kDa (as indicated) using 0.5 µg/mL of Rabbit Anti-Human/Mouse/Rat HSP60 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1800, R&D Systems). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

Simple Western™ Certified Antibodies from both Novus Biologicals and R&D Systems

Features

- Guaranteed Simple Western performance
- Largest selection of certified antibodies in the market with over 1,000 and growing
- Optimized antibody and lysate concentrations to save you time
- Antibodies receive a “Badge of Honor” which is easily visible in online search
- Test an antibody not yet certified in Simple Western and become eligible for rewards

- 14-3-3 Gamma
- 4-Hydroxynonenal
- A20/TNFAIP3
- Actin
- Adenosine A2a Receptor
- AKT
- alpha Tubulin
- alpha Synuclein
- Annexin A2
- ATG5
- ATG7
- ATM
- Axl
- Bcl-2
- Beclin 2
- beta Tubulin
- Beta Tubulin III
- BST2
- Cadherin 11
- Calnexin
- Calreticulin
- Caspase 3
- Caspase 8
- CCR5
- CD3
- CD38
- CD4
- CD106/VCAM1
- CD31/PECAM1
- CDX2
- cIAP (pan)
- cIAP-2/HIAP-1
- c-Myc
- Complement C3
- COX IV
- CXCR4
- Cytochrome C
- Cytokeratin 5
- Cytokeratin 18
- Cytokeratin 19
- DDR2
- Dnmt1
- Dnmt3b
- DRP1
- DYKDDDDK Epitope Tag
- Dynamin
- EGF R/ErbB1
- EGLN1/PHD2
- Enolase 1
- Enolase 2
- ER alpha/NR3A1
- ErbB2/Her2
- ERK1/ERK2
- FANCD2
- GAP-43
- GAPDH
- GFAP
- GFP
- HDAC1
- HDAC2
- HDAC6
- HGF R/c-MET
- HIF-1 alpha
- HIF-2 alpha
- His Tag
- Histone H4
- HSP27
- HSP60
- HSP70/HSPA1A
- IKK alpha
- IKK beta
- LC3
- LDL Receptor
- LOX
- MMR/CD206
- MTH1
- NBR1
- NBS1
- Nestin
- NeuN
- NuMA
- OXPAT
- p38
- p53
- p62/SQSTM1
- p70 S6 Kinase
- p73
- PCNA
- PDZK1
- Perilipin 2
- phospho-p53
- phospho-STAT1
- phospho-STAT6
- PINK1
- PRAME
- PTK7/CCK4
- RBFOX3/NeuN
- S100A7/Psoriasin
- S100A9
- SCP1
- Sirtuin 1/SIRT1
- SNAIL
- SNX27
- SOX2
- SOX9
- SR-BI
- SREBP1
- STAT5b
- Survivin
- TERT
- Tie-2
- TMEM26
- TRIF
- Tyrosine Hydroxylase
- UCP1
- Vimentin
- VPS34
- WT1
- xCT
- ZEB1

Products

Proteome Profiler™ Membrane-based Antibody Arrays

Kit	Description
Human Angiogenesis Array Kit Catalog # ARY007	**Contains 4 membranes - each spotted in duplicate with 55 different angiogenesis antibodies** • Activin A • ADAMTS1• Angiogenin • Angiopoietin-1 • Angiopoietin-2 • Angiostatin/Plasminogen • Amphiregulin • Artemin • CCL2/MCP-1 • CCL3/MIP-1α • Coagulation Factor III/Tissue Factor • CXCL4/PF4 • CXCL8/IL-8 • CXCL16 • DPPIV/CD26 • EGF • EG-VEGF/PK1 • Endoglin/CD105 • Endostatin • Endothelin-1 • FGF acidic • FGF basic • FGF-4 • GDNF • GM-CSF • HB-EGF • HGF • IGFBP-1 • IGFBP-2 • IGFBP-3 • IL-1β/IL-1F2 • KGF/FGF-7 • LAP (TGF-β1) • Leptin • MMP-8 • MMP-9 • NRG1-β1/HRG1-β1 • Pentraxin 3/TSG-14 • PD-ECGF/Thymidine Phosphorylase • PDGF-AA • PDGF-AB/PDGF-BB • Persephin • PlGF • Prolactin • Serpin B5/Maspin • Serpin E1/PAI-1 • Serpin F1/PEDF • Thrombospondin-1 • Thrombospondin-2 • TIMP-1 • TIMP-4 • u-Plasminogen Activator/Urokinase • Vasohibin • VEGF • VEGF-C
Mouse Angiogenesis Array Kit Catalog # ARY015	**Contains 4 membranes - each spotted in duplicate with 53 different angiogenesis antibodies** ADAMTS1 • Amphiregulin • Angiogenin • Angiopoietin-1 • Angiopoietin-3 • CCL2/JE/MCP-1 • CCL3/MIP-1α • Coagulation Factor III/Tissue Factor • CX3CL1/Fractalkine • CXCL1/KC • CXCL4/PF4 • CXCL10/IP-10/CRG-2 • CXCL12/SDF-1 • CXCL16 • Cyr61/CNN1 • DLL4 • DPPIV/CD26 • EGF • Endoglin/CD105 • Endostatin • Endothelin-1 • FGF acidic • FGF basic • GM-CSF • HB-EGF • HGF • IGFBP-1 • IGFBP-2 • IGFBP-3 • IL-1α/IL-1F1 • IL-1β/IL-1F2 • IL-10 • KGF/FGF-7 • Leptin • MMP-3 (pro and mature) • MMP-8 (pro) • MMP-9 (pro and active) • NOV/CCN3 • Osteopontin (OPN) • PD-ECGF/Thymidine Phosphorylase • PDGF-AA • PDGF-AB/BB • Pentraxin-3/TSG-14 • PlGF-2 • Prolactin • Proliferin • Serpin E1/PAI-1 • Serpin F1/PEDF • Thrombospondin-2 • TIMP-1 • TIMP-4 • VEGF • VEGF-B
Human Apoptosis Array Kit Catalog # ARY009	**Contains 4 arrays - each spotted in duplicate with 35 different apoptosis-related antibodies** Bad • Bax • Bcl-2 • Bcl-x • Pro-Caspase-3 • Cleaved Caspase-3 • Catalase • Claspin • Clusterin • Cytochrome c • FADD • Fas/TNFRSF6/CD95 • HIF-1α • HO-1/HMOX1 • HO-2/HMOX2 • HSP27 • HSP60 • HSP70/HSPA1A • HTRA2/Omi • cIAP-1 (HIAP-2) • cIAP-2 (HIAP-1) • Livin • p21/CIP1/CDNK1A • p27/Kip1 • Phospho-p53 (S15) • Phospho-p53 (S46) • Phospho-p53 (S392) • PON2 • Phospho-Rad17 (S635) • SMAC/Diablo • Survivin • TNF RI/TNFRSF1A • TRAIL R1/TNFRSF10A • TRAIL R2/TNFRSF10B • XIAP
Human Cell Stress Array Kit Catalog # ARY018	**Contains 4 arrays - each spotted in duplicate with 26 different cell stress-related antibodies** ADAMTS1 • Bcl-2 • Carbonic Anhydrase IX • Cited-2 • COX-2 • Cytochrome c • Dkk-4 • FABP1/L-FABP • HIF-1α • HIF-2α/EPAS1 • Phospho-HSP27 (S78/S82) • HSP60 • HSP70/HSPA1A • IDO • Phospho-JNK Pan (T183/Y185) • NFκB1 • p21/CIP1/CDKN1A • p27/Kip1 • Phospho-p38α (T180/Y182) • Phospho-p53 (S46) • PON1 • PON2 • PON3 • Thioredoxin-1 • SIRT2 • SOD2/Mn-SOD
Human Chemokine Array Kit Catalog # ARY017	**Contains 4 membranes - each spotted in duplicate with 31 different chemokine antibodies** CCL1/I-309 • CCL2/MCP-1 • CCL3/CCL4 (MIP-1α/MIP-1β) • CCL5/RANTES • CCL7/MCP-3 • CCL14/HCC-1/HCC-3 • CCL15/MIP-1β/LKN-1 • CCL17/TARC • CCL18/PARC • CCL19/MIP-3β • CCL20/MIP-3α • CCL21/6Ckine • CCL22/MDC • CCL26/Eotaxin-3 • CCL28 • Chemerin • CX3CL1/Fractalkine • CXCL1/GROα • CXCL4/PF4 • CXCL5/ENA-78 • CXCL7/NAP-2 • CXCL8/IL-8 • CXCL9/MIG • CXCL10/IP-10 • CXCL11/I-TAC • CXCL12/SDF-1 • CXCL16 • CXCL17/VCC-1 • IL-16 • Midkine • XCL1/Lymphotactin
Mouse Chemokine Array Kit Catalog # ARY020	**Contains 4 membranes - each spotted in duplicate with 25 different chemokine antibodies** CCL2/JE/MCP-1 • CCL3/CCL4 (MIP-1α/MIP-1β) • CCL5/RANTES • CCL6/C10 • CCL8/MCP-2 • CCL9/10/MIP-1γ • CCL11/Eotaxin • CCL12/MCP-5 • CCL21/6Ckine • CCL22/MDC • CCL27/CTACK • CCL28 • Chemerin • Complement Component C5a • CX3CL1/Fractalkine • CXCL1/KC • CXCL2/MIP-2 • CXCL9/MIG • CXCL10/IP-10/CRG-2 • CXCL11/I-TAC • CXCL12/SDF-1 • CXCL13/BLC/BCA-1 • CXCL16 • IL-16 • LIX
Human Cytokine Array Kit, Panel A Catalog # ARY005	**Contains 4 arrays - each spotted in duplicate with 36 different cytokine antibodies** C5a • CCL1/I-309 • CCL2/MCP-1 • CCL3/MIP-1α • CCL4/MIP-1β • CCL5/RANTES • CD40 Ligand/TNFSF5 • CXCL1/GROα • CXCL8/IL-8 • CXCL10/IP-10 • CXCL11/I-TAC • CXCL12/SDF-1α • G-CSF • GM-CSF • ICAM-1/CD54 • IFN-γ • IL-1α/IL-1F1 • IL-1β/IL-1F2 • IL-1ra/IL-1F3 • IL-2 • IL-4 • IL-5 • IL-6 • IL-10 • IL-12 p70 • IL-13 • IL-16 • IL-17 • IL-17E/IL-25 • IL-23 • IL-27 • IL-32α • MIF • Serpin E1/PAI-1 • TNF-α • TREM-1
Human XL Cytokine Array Kit Catalog # ARY022	**Contains 4 membranes - each spotted in duplicate with 102 different cytokine antibodies** Adiponectin/Acrp30 • Aggrecan • Angiogenin • Angiopoietin-1 • Angiopoietin-2 • BAFF/BLyS/TNFSF13B • BDNF • C5a • CCL2/MCP-1 • CCL3/CCL4 (MIP-1α/MIP-1β) • CCL5/RANTES • CCL7/MCP-3 • CCL17/TARC • CCL19/MIP-3β • CCL20/MIP-3α • CD14 • CD30/TNFRSF8 • CD40 Ligand/TNFSF5 • Chitinase 3-like 1 • Complement Factor D • C-Reactive Protein/CRP • Cripto-1 • CXCL1/GROα • CXCL4/PF4 • CXCL5/ENA-78 • CXCL8/IL-8 • CXCL9/MIG • CXCL10/IP-10 • CXCL11/I-TAC • CXCL12/SDF-1α • Cystatin C • Dkk-1 • DPPIV/CD26 • EGF • Endoglin/CD105 • EMMPRIN/CD147 • Fas Ligand/TNFSF6 • FGF basic • KGF/FGF-7 • FGF-19 • Flt-3 Ligand • G-CSF • GDF-15 • GM-CSF • Growth Hormone • HGF • ICAM-1/CD54 • IFN-γ • IGFBP-2 • IGFBP-3 • IL-1α/IL-1F1 • IL-1β/IL-1F2 • IL-1ra/IL-1F3 • IL-2 • IL-3 • IL-4 • IL-5 • IL-6 • IL-10 • IL-11 • IL-12 p70 • IL-13 • IL-15 • IL-16 • IL-17A • IL-18 BPa • IL-19 • IL-22 • IL-23 • IL-24 • IL-27 • IL-31 • IL-32α/β/γ • IL-33 • IL-34 • Kallikrein 3/PSA • Leptin • LIF • Lipocalin-2/NGAL • M-CSF • MIF • MMP-9 • Myeloperoxidase • Osteopontin (OPN) • PDGF-AA • PDGF-AB/BB • Pentraxin 3/TSG-14 • RAGE • RBP4 • Relaxin-2 • Resistin • Serpin E1/PAI-1 • SHBG • ST2/IL-1 R4 • TFF3 • TfR • TGF-α • Thrombospondin-1 • TNF-α • uPAR • VEGF • Vitamin D BP
Mouse Cytokine Array Kit, Panel A Catalog # ARY006	**Contains 4 arrays - each spotted in duplicate with 40 different cytokine antibodies** C5a • CCL1/TCA-3 • CCL2/JE/MCP-1 • CCL3/MIP-1α • CCL4/MIP-1β • CCL5/RANTES • CCL11/Eotaxin • CCL12/MCP-5 • CCL17/TARC • CXCL1/KC • CXCL2/MIP-2 • CXCL9/MIG • CXCL10/IP-10/CRG-2 • CXCL11/I-TAC • CXCL12/SDF-1α • CXCL13/BLC/BCA-1 • G-CSF • GM-CSF • ICAM-1/CD54 • IFN-γ • IL-1α/IL-1F1 • IL-1β/IL-1F2 • IL-1ra/IL-1F3 • IL-2 • IL-3 • IL-4 • IL-5 • IL-6 • IL-7 • IL-10 • IL-12 p70 • IL-13 • IL-16 • IL-17 • IL-23 • IL-27 • IL-32α • M-CSF • TIMP-1 • TNF-α • TREM-1

Kit	Description
Mouse XL Cytokine Array Kit Catalog # ARY028	**Contains 4 membranes - each spotted in duplicate with 111 different cytokine antibodies** Adiponectin/Acrp30 • Amphiregulin • Angiopoietin-1 • Angiopoietin-2 • BAFF/BLyS/TNFSF13B • C1q R1/CD93 • CCL2/JE/MCP-1 • CCL3/CCL4 (MIP-1α/MIP-1β) • CCL5/RANTES • CCL6/C10 • CCL11/Eotaxin • CCL12/MCP-5 • CCL17/TARC • CCL19/MIP-3β • CCL20/MIP-3α • CCL21/6Ckine • CCL22/MDC • CD14 • CD40/TNFRSF5 • CD160 • Chemerin • Chitinase 3-like 1 • Coagulation Factor III/Tissue Factor • Complement Component C5/C5a • Complement Factor D • C-Reactive Protein/CRP • CX3CL1/Fractalkine • CXCL1/KC • CXCL2/MIP-2 • CXCL9/MIG • CXCL10/IP-10 • CXCL11/I-TAC • CXCL13/BLC/BCA-1 • CXCL16 • Cystatin C • Dkk-1 • DPPIV/CD26 • EGF • Endoglin/CD105 • Endostatin • Fetuin A/AHSG • FGF acidic • FGF-21 • Flt-3 Ligand • Gas6 • G-CSF • GDF-15 • GM-CSF • HGF • ICAM-1/CD54 • IFN-γ • IGFBP-1 • IGFBP-2 • IGFBP-3 • IGFBP-5 • IGFBP-6 • IL-1α/IL-1F1 • IL-1β/IL-1F2 • IL-1ra/IL-1F3 • IL-2 • IL-3 • IL-4 • IL-5 • IL-6 • IL-7 • IL-10 • IL-11 • IL-12 p40 • IL-13 • IL-15 • IL-17A • IL-22 • IL-23 • IL-27 • IL-28 • IL-33 • LDL R • Leptin • LIF • Lipocalin-2/NGAL • LIX • M-CSF • MMP-2 • MMP-3 • MMP-9 • Myeloperoxidase • Osteopontin (OPN) • Osteoprotegerin/TNFRSF11B • PD-ECGF/Thymidine Phosphorylase • PDGF-BB • Pentraxin 2/SAP • Pentraxin 3/TSG-14 • Periostin/OSF-2 • Pref-1/DLK-1/FA1 • Proliferin • Proprotein Convertase 9/PCSK9 • RAGE • RBP4 • Reg3G • Resistin • E-Selectin/CD62E • P-Selectin/CD62P • Serpin E1/PAI-1 • Serpin F1/PEDF • Thrombopoietin • TIM-1/KIM-1/HAVCR • TNF-α • VCAM-1/CD106 • VEGF • WISP-1/CCN4
Rat Cytokine Array Kit, Panel A Catalog # ARY008	**Contains 4 arrays - each spotted in duplicate with 29 different cytokine antibodies** CCL3/MIP-1α • CCL5/RANTES • CCL20/MIP-3α. CNTF • CXC3CL1/Fractalkine • CXCL1/CINC-1 • CXCL2/CINC-3 • CXCL3/CINC-2α/β • CXCL7/Thymus Chemokine-1 • CXCL9/MIG • CXCL10/IP-10 • GM-CSF • ICAM-1/CD54 • IFN-γ • IL-1α/IL-1F1 • IL-1β/IL-1F2 • IL-1ra/IL-1F3 • IL-2 • IL-3 • IL-4 • IL-6 • IL-10 • IL-13 • IL-17 • LIX • L-Selectin/CD62L • TIMP-1 • TNF-α • VEGF
Human XL Oncology Array Kit Catalog # ARY026	**Contains 4 membranes - each spotted in duplicate with 84 different cancer-related antibodies** Amphiregulin • Angiopoietin-1 • Angiopoietin-like 4 • Axl • Bcl-x • CA125/MUC16 • E-Cadherin • VE-Cadherin • CapG • Carbonic Anhydrase IX • Cathepsin B • Cathepsin D • Cathepsin S • CCL2/MCP-1 • CCL3/MIP-1α • CCL7/MCP-3 • CCL8/MCP-2 • CCL20/MIP-3α • CD25/IL-2 Rα • CD31/PECAM-1 • CEACAM-5 • CGα/β (HCG) • CXCL8/IL-8 • Decorin • Dkk-1 • DLL1 • EGF R/ErbB1 • Endoglin/CD105 • Endostatin • Enolase 2/Neuron-Specific Enolase • ENPP-2/Autotaxin • eNOS • EpCAM/TROP1 • ER α/NR3A1 • ErbB2/Her2 • ErbB3/Her3 • ErbB4/Her4 • α-Fetoprotein • FGF basic • FoxC2 • FoxO1/FKHR • Galectin-3 • GM-CSF • HGF R/c-Met • HIF-1α • HNF-3β/FoxA2 • HO-1/HMOX1 • ICAM-1/CD54 • IL-6 • IL-18 BPa • Kallikrein 3/PSA • Kallikrein 5 • Kallikrein 6/Neurosin • Leptin • Lumican • M-CSF • Mesothelin • MMP-2 • MMP-3 • MMP-9 • MSP/MST1 • MUC-1 • Nectin-4 • Osteopontin (OPN) • p27/Kip1 • p53 • PDGF-AA • Progesterone R/NR3C3 • Progranulin • Prolactin • Prostasin/Prss8 • E-Selectin/CD62E • Serpin B5/Maspin • Serpin E1/PAI-1 • SNAIL • SPARC • Survivin • Tenascin C • Thrombospondin-1 • TIE-2 • u-Plasminogen Activator/Urokinase • VCAM-1/CD106 • VEGF • Vimentin
Human NFκB Pathway Array Kit Catalog # ARY029	**Contains 4 membranes - each spotted in duplicate with 45 different antibodies recognizing NFκB signal transduction proteins** ASC • BCL10 • CARD6 • CD40/TNFRSF5 • cIAP1/BIRC2 • cIAP2/BIRC3 • c-Rel • FADD/MORT1 • Fas/TNFRSF6/CD95 • IKK1/IKKα/CHUK • IKK2/IKKβ • IKKγ/NEMO • IL-1 RI • IL-17 RA • IL-18 Rα • IRAK1 • IRF5 • IRF8 • IκBα • IκBε • JNK1/2 • JNK2 • LTBR/TNFRSF3 • Metadherin/AEG-1 • MYD88 • NFκB1 • NFκB2 • NGF R/TNFRSF16 • p53 • p53 (pS46) • RelA/p65 • RelA/p65 (pS529) • SHARPIN • SOCS6 • STAT1 (pY701) • STAT1p91 • STAT2 • STAT2 (pY689) • STING/TMEM173 • TLR2 • TNF RI/TNFRSF1A • TNF RII/TNFRSF1B • TRAF2 • TRAIL R1/DR4 • TRAIL R2/DR5
Human Phospho-Immunoreceptor Array Kit Catalog # ARY004B	**Contains 4 arrays - each spotted in duplicate with 59 different antibodies recognizing proteins involved in immunoreceptor signaling** 2B4/CD244/SLAMF4 • BLAME/SLAMF8 • BTLA • CD3ε • CD5 • CD6 • CD23/Fcε RII • CD28 • CD31/PECAM • CD84/SLAMF5 • CD229/SLAMF3 • CD300A/LMIR1 • CD300C/LMIR2 • CD300E/LMIR6 • CD300F/LMIR3 • CEACAM-1/CD66a • CLEC-1 • CLEC-2 • CRACC/SLAMF7 • CTLA-4 • DCIR/CLEC4A • Dectin-1/CLEC7A • DNAM-1/CD226 • Fcγ RIIA/CD32a • Fcγ RIIIA/B/CD16a/b • FCRL1/FcRH1 • FCRL2/FcRH2 • FCRL4/FcRH4 • FCRL5/FcRH5 • ILT2/CD85j • ILT3/CD85k • ILT4/CD85d • ILT5/CD85a • ILT6/CD85e • Integrin β3/CD61 • KIR2DL4/CD158d • LAIR-1 • LAIR-2 • MDL-1/CLEC5A • NKp30/NCR3 • NKp44/NCR2 • NKp46/NCR1 • NKp80/KLRF1 • NTB-A/SLAMF6 • PD-1 • SHIP-1 • SHP-1 • SHP-2 • Siglec-2/CD22 • Siglec-3/CD33 • Siglec-5/CD170 • Siglec-7/CD328 • Siglec-9 • Siglec-10 • SIRP-β1/CD172b • SLAM/CD150 • TREM-1 • TREM-2 • TREML1/TLT-1
Human Phospho-Kinase Array Kit Catalog # ARY003B	**Contains 4 sets of 2 membranes - each spotted in duplicate with antibodies against 43 different kinase phosphorylation sites and 2 related proteins** Akt1/2/3 (S473) • Akt1/2/3 (T308) • AMPKα1 (T183) • AMPKα2 (T172) • β-Catenin • Chk2 (T68) • c-Jun (S63) • CREB (S133) • EGF R (Y1068) • eNOS (S1177) • ERK1/2 (T202/Y204 • T185/Y187) • FAK (Y397) • Fgr (Y412) • Fyn (Y420) • GSK-3α/β (S21/S9) • Hck (Y411) • HSP27 (S78/S82) • HSP60 • JNK1/2/3 (T183/Y185 • T221/Y223) • Lck (Y394) • Lyn (Y397) • MSK1/2 (S376/S360) • p27/Kip1 (T198) • p38α (T180/Y182) • p53 (S15) • p53 (S46) • p53 (S392) • p70 S6 Kinase (T421/S424) • PDGF Rβ (Y751) • PLC-γ1 (Y783) • PRAS40 (T246) • PYK2/FAK2 (Y402) • RSK1/2/3 (S380) • Src (Y419) • STAT2 (Y689) • STAT3 (Y705) • STAT3 (S727) • STAT5a (Y699) • STAT5a/b (Y699) • STAT5b (Y699) • STAT6 (Y641) • TOR (S2448) • WNK-1 (T60) • Yes (Y426)
Human Phospho-MAPK Array Kit Catalog # ARY002B	**Contains 4 arrays - each spotted in duplicate with 26 different antibodies recognizing mitogen activated protein kinases (MAPKs) and other kinases** Akt1 (S473) • Akt2 (S474) • Akt3 (S472) • Akt (S473 • S474 • S472) Pan Specific • CREB (S133) • ERK1 (T202/Y204) • ERK2 (T185/Y187) • GSK-3α/β (S21/S9) • GSK-3β (S9) • HSP27 (S78/S82) • JNK1 (T183/Y185) • JNK2 (T183/Y185) • JNK3 (T221/Y223) • JNK (T183/Y185)/(T221/Y223) Pan Specific • MKK3 (S218/T222) • MKK6 (S207/T211) • MSK2/RSKB (S360) • p38α (T180/Y182) • p38β (T180/Y182) • p38δ (T180/Y182) • p38γ (T183/Y185) • p53 (S46) • p70 S6 Kinase (T421/S424) • RSK1 (S380) • RSK2 (S386) • TOR (S2448)
Human Phospho-RTK Array Kit Catalog # ARY001B	**Contains 4 arrays - each spotted in duplicate with 49 different receptor tyrosine kinase (RTK) antibodies** ALK/CD246 • Axl • CD117/c-kit • DDR1 • DDR2 • Dtk • EGF R • EphA1 • EphA2 • EphA3 • EphA4 • EphA5 • EphA6 • EphA7 • EphA10 • EphB1 • EphB2 • EphB3 • EphB4 • EphB6 • ErbB2/Her2 • ErbB3/Her3 • ErbB4/Her4 • FGF R1 • FGF R2α • FGF R3 • FGF R4 • Flt-3/Flk-2 • HGF R/c-MET • IGF-I R • Insulin R/CD220 • M-CSF R • Mer • MSP R/Ron • MuSK • PDGF Rα • PDGF Rβ • Ret • ROR1 • ROR2 • Ryk • Tie-1 • Tie-2 • TrkA • TrkB • TrkC • VEGF R1/Flt-1 • VEGF R2/KDR • VEGF R3/Flt-4

Kit	Description
Mouse Phospho-RTK Array Kit Catalog # ARY014	**Contains 4 arrays - each spotted in duplicate with 39 different receptor tyrosine kinase (RTK) antibodies** Axl • CD117/c-kit • DtK • EGF R • EphA1 • EphA2 • EphA3 • EphA6 • EphA7 • EphA8 • EphB1 • EphB2 • EphB4 • EphB6 • ErbB2/Her2 • ErbB3/Her3 • ErbB4/Her4 • FGF R2 (IIIc) • FGF R3 • FGF R4 • Flt-3/Flk-2 • HGF R/c-MET • IGF-I R • Insulin R/CD220 • M-CSF R • Mer • MSP R • MuSK • PDGF Rα • PDGF Rβ • Ret • Tie-1 • Tie-2 • TrkA • TrkB • TrkC • VEGF R1/Flt-1 • VEGF R2/Flk-1 • VEGF R3/Flt-4
Human Pluripotent Stem Cell Array Kit Catalog # ARY010	**Contains 8 arrays - each spotted in duplicate with 15 different stem cell marker antibodies** E-Cadherin • α-Fet oprotein • GATA-4 • Goosecoid • CGα/β (HCG) • HNF-3β/FoxA2 • Nanog • Oct-3/4 • Otx2 • PDX-1/IPF1 • Snail • SOX2 • SOX17 • p63/TP73L • VEGF R2/KDR
Human Protease Antibody Array Kit Catalog # ARY021B	**Contains 4 membranes - each spotted in duplicate with 35 different protease antibodies** ADAM8 • ADAM9 • ADAMTS1 • ADAMTS13 • Cathepsin A • Cathepsin B • Cathepsin C/DPPI • Cathepsin D • Cathepsin E • Cathepsin L • Cathepsin S • Cathepsin V • Cathepsin X/Z/P • DPPIV/CD26 • Kallikrein 3/PSA • Kallikrein 5 • Kallikrein 6 • Kallikrein 7 • Kallikrein 10 • Kallikrein 11 • Kallikrein 13 • MMP-1 • MMP-2 • MMP-3 • MMP-7 • MMP-8 • MMP-9 • MMP-10 • MMP-12 • MMP-13 • Neprilysin/CD10 • Presenilin-1 • Proprotein Convertase 9/PCSK9 • Proteinase 3/PRTN3 • u-Plasminogen Activator/Urokinase
Human Protease Inhibitor Kit Catalog # ARY023	**Contains 4 membranes - each spotted in duplicate with 32 different protease inhibitor antibodies** APP • Cystatin A • Cystatin B • Cystatin C • Cystatin E/M • EMMPRIN/CD147 • Fetuin B • HAI-1 • HAI-2 • HE4/WRDC2 • Latexin • Lipocalin-1 • Lipocalin-2/NGAL • RECK • Serpin A5 • Serpin A8/AGT • Serpin A9/Centerin • Serpin A12 • Serpin B5/Maspin • Serpin B6 • Serpin B8 • Serpin E1/PAI-1 • Serpin F1/PEDF • Testican 1/SPOCK1 • Testican 2/SPOCK2 • TFPI • TFPI-2 • TIMP-1 • TIMP-2 • TIMP-3 • TIMP-4 • Trappin-2/Elafin
Human Protease/Protease Inhibitor Array Kit Catalog # ARY025	**Contains 4 membranes - 2 spotted in duplicate with antibodies against 35 different proteases and 2 spotted in duplicate with antibodies against 32 different protease inhibitors** **Protease Inhibitors:** APP • Cystatin A • Cystatin B • Cystatin C • Cystatin E/M • EMMPRIN/CD147 • Fetuin B • HAI-1 • HAI-2 • HE4/WRDC2 • Latexin • Lipocalin-1 • Lipocalin-2/NGAL • RECK • Serpin A5 • Serpin A8/AGT • Serpin A9/Centerin • Serpin A12 • Serpin B5/Maspin • Serpin B6 • Serpin B8 • Serpin E1/PAI-1 • Serpin F1/PEDF • Testican 1/SPOCK1 • Testican 2/SPOCK2 • TFPI • TFPI-2 • TIMP-1 • TIMP-2 • TIMP-3 • TIMP-4 • Trappin-2/Elafin **Proteases:** ADAM8 • ADAM9 • ADAMTS1 • ADAMTS13 • Cathepsin A • Cathepsin B • Cathepsin C/DPPI • Cathepsin D • Cathepsin E • Cathepsin L • Cathepsin S • Cathepsin V • Cathepsin X/Z/P • DPPIV/CD26 • Kallikrein 3/PSA • Kallikrein 5 • Kallikrein 6/Neurosin • Kallikrein 7 • Kallikrein 10 • Kallikrein 11 • Kallikrein 13 • MMP-1 • MMP-2 • MMP-3 • MMP-7 • MMP-8 • MMP-9 • MMP-10 • MMP-12 • MMP-13 • Neprilysin/CD10 • Presenilin-1 • Proprotein Convertase 9/PCSK9 • Proteinase 3/PRTN3 • u-Plasminogen Activator/Urokinase
Human Soluble Receptor Antibody Array Kit • Hematopoietic Panel Catalog # ARY011	**Contains 4 membranes - 2 spotted in duplicate with 48 different hematopoietic antibodies and 2 spotted in duplicate with 57 common antibodies** **Hematopoietic Panel:** CD5 • CD6 • CD30/TNFRSF8 • CD40/TNFRSF5 • CD43 • CD48/SLAMF2 • CD59 • CD84/SLAMF5 • CD97 • CD163 • CD229/SLAMF3 • Chitinase 3-like 1 • C-Reactive Protein/CRP • CRTAM • CXCL16 • DNAM-1 • DPPIV/CD26 • IFN-γ R2 • IL-2 Rα • IL-2 Rβ • IL-6 R • Integrin α3/CD49c • Integrin α4/CD49d • Integrin α5/CD49e • Integrin α6/CD49f • Integrin α9 • Integrin αE/CD103 • Integrin αL/CD11a • Integrin αM/CD11b • Integrin αX/CD11c • LAG-3 • MMP-9 • MMR/CD206 • Myeloperoxidase • Resistin • L-Selectin/CD62L • Siglec-5 • Siglec-6/CD327 • Siglec-7/CD328 • Siglec-9 • Siglec-10 • TIM-3 • TLR2 • TLR4 • TNF RI/TNFRSF1A • TRACP/PAP/ACP5 • TRANCE/RANKL/TNFSF11 • TREM-1 **Common Analytes Panel:** ACE • ADAM8 • ADAM9 • ADAM10 • ALCAM • Amphiregulin • APP Pan Specific • BACE-1 • BCAM • C1q R1/CD93 • CD9 • CD23/Fcε RII • CD31/PECAM-1 • CD36/SR-B3 • CD40 Ligand/TNFSF5 • CD44H • CD58/LFA-3 • CD90/Thy1 • CD99 • CD155/PVR • CEACAM-1 • CX3CL1/Fractalkine • CXCL8/IL-8 • EMMPRIN • Endoglin/CD105 • Epiregulin • Galectin-1 • Galectin-3 • Galectin-3BP/MAC-2BP • HB-EGF • ICAM-2/CD102 • IL-1 RII • IL-15 Rα • Integrin β1/CD29 • Integrin β2/CD18 • Integrin β3/CD61 • Integrin β4/CD104 • Integrin β5 • Integrin β6 • JAM-A • Lipocalin-2/NGAL • LOX-1/OLR1 • MD-1 • MMP-2 • NCAM-1/CD56 • NCAM-L1 • Osteopontin (OPN) • PAR1 • Pref-1/DLK-1/FA1 • RECK • Stabilin-1 • TACE/ADAM17 • Thrombospondin-1 • TIMP-1 • TIMP-2 • TIMP-3 • TNF RII/TNFRSF1B
Human Soluble Receptor Antibody Array Kit • Non-Hematopoietic Panel Catalog # ARY012	**Contains 4 membranes - 2 spotted in duplicate with 62 different non-hematopoietic antibodies and 2 spotted in duplicate with 57 common antibodies** **Non-Hematopoietic Panel:** ADAM15 • βIG-H3 • BMPR-IB/ALK-6 • Cadherin-4/R-Cadherin • Cadherin-11 • Cadherin-13 • E-Cadherin • N-Cadherin • P-Cadherin • VE-Cadherin • Cathepsin D • CD40/TNFRSF5 • CEACAM-5 • CHL-1/LICAM-2 • Clusterin • Coagulation Factor II/Thrombin • COMP • CRELD2 • Desmoglein-2 • ECM-1 • EGF R/ErbB1 • Endoglycan • EpCAM/TROP1 • ErbB2/Her2 • ErbB3/Her3 • ErbB4/Her4 • ESAM • Galectin-2 • HPRG • Integrin α3/CD49c • Integrin α5/CD49e • Integrin α6/CD49f • Integrin α9 • Integrin αV/CD51 • Jagged 1 • JAM-B/VE-JAM • JAM-C • LRP-6 • MCAM/CD146 • MEPE/OF45 • MUCDHL • Nectin-2/CD112 • Nectin-4 • Neurotrimin • Notch-1 • NrCAM • Periostin/OSF-2 • Podocalyxin • E-Selectin/CD62E • Semaphorin 3A • SREC-I/SCARF1 • SREC-II/SCARF2 • Stanniocalcin 1 • Syndecan-1 • Syndecan-4 • Thrombospondin-2 • TIMP-4 • TROP-2 • VAP-1 • VCAM-1/CD106 • VEGF R1/Flt-1 • VEGF R2/KDR **Common Analytes Panel:** ACE • ADAM8 • ADAM9 • ADAM10 • ALCAM • Amphiregulin • APP Pan Specific • BACE-1 • BCAM • C1q R1/CD93 • CD9 • CD23/Fcε RII • CD31/PECAM-1 • CD36/SR-B3 • CD40 Ligand/TNFSF5 • CD44H • CD58/LFA-3 • CD90/Thy1 • CD99 • CD155/PVR • CEACAM-1 • CX3CL1/Fractalkine • CXCL8/IL-8 • EMMPRIN • Endoglin/CD105 • Epiregulin • Galectin-1 • Galectin-3 • Galectin-3BP/MAC-2BP • HB-EGF • ICAM-2/CD102 • IL-1 RII • IL-15 Rα • Integrin β1/CD29 • Integrin β2/CD18 • Integrin β3/CD61 • Integrin β4/CD104 • Integrin β5 • Integrin β6 • JAM-A • Lipocalin-2/NGAL • LOX-1/OLR1 • MD-1 • MMP-2 • NCAM-1/CD56 • NCAM-L1 • Osteopontin (OPN) • PAR1 • Pref-1/DLK-1/FA1 • RECK • Stabilin-1 • TACE/ADAM17 • Thrombospondin-1, TIMP-1, TIMP-2, TIMP-3, TNF RII/TNFRSF1B
Human Ubiquitin Array Kit Catalog # ARY027	**Contains 4 membranes - each spotted in duplicate with antibodies against 49 different ubiquitinated proteins** A20/TNFAIP3 • ATF4 • Bcl-2 • β-TrCP1 • Caspase-8 • CBL • Cyclin D1 • CD44 • cIAP-1/HIAP-2 • cIAP-2/HIAP-1 • COX-2 • EGF R/ErbB1 • ER-α • ErbB2/Her2 • ErbB3/Her3 • ErbB4/Her4 • Fatty Acid Synthase • F-box protein 15 • FBXW7/Cdc4 • FGF R2α/FGF R2β • HGF R/c-MET • HIF-1α • HSP70/HSPA1A • HSP90 • IGF-I R • IκB-α • IκB-ε • IKKγ • Insulin R/CD220 • IRAK1 • IRF3 • IRS1 • M-CSF R • MSP R/Ron • Nrf2 • NIK/MAP3K14 • p21/CIP1/CDKN1A • p53 • PDGF Rα • PDGF Rβ • RIPK1/RIP1 • SCF R/CD117/c-kit • TfR • TNF RI/TNFRSF1A • TRAF-2 • TRAF-3 • TRAF-6 • TrkA • VEGF R3/Flt-4

Tocris® Small Molecules

Category	Product Name	Description	Catalog #
Akt (Protein Kinase B)			
Activators	SC 79	Akt activator	4635
Inhibitors	API-2	Selective inhibitor of Akt/PKB signaling; antitumor and antiviral	2151
	PHT 427	Dual Akt and PDK1 inhibitor; antitumor	4598
AMPK			
Activators	A 769662	Potent AMPK activator	3336
	AICAR	AMPK activator	2840
	Metformin	Activator of LKB1/AMPK; antidiabetic agent	2864
Inhibitor	Dorsomorphin	Potent and selective AMPK inhibitor	3093
EGFR			
Inhibitors	AG 1478	Highly potent EGFR-kinase inhibitor	1276
	AG 490	EGFR-kinase inhibitor; also JAK2, JAK3 inhibitor	0414
	Iressa	Orally active, selective EGFR inhibitor	3000
Eph Receptors			
Inhibitors	KYL	EphA4 kinase inhibitor; neuroprotective	5290
	NVP BHG 712	Potent EphB4 kinase inhibitor	4405
ERK			
Inhibitors	BIX 02189	Selective MEK5 and ERK5 inhibitor	4842
	ERK5-IN-1	Potent and selective ERK5 inhibitor	5393
	XMD 8-92	Selective ERK5/BMK1 inhibitor	4132
FGFR			
Inhibitors	PD 173074	FGFR1 and -3 inhibitor	3044
	SU 5402	Potent FGFR and VEGFR inhibitor	3300
FLT3			
Inhibitors	AC 710	Potent FLT3 inhibitor; also inhibits other PDGFR family members	5013
	Lestaurtinib	JAK2, FLT3 and TrkA inhibitor	3395
	TCS 359	Potent FLT3 inhibitor	2591
GSK-3			
Inhibitors	BIO	Potent, selective GSK-3 inhibitor	3194
	CHIR 99021	Highly selective GSK-3 inhibitor	4423
	SB 216763	Potent, selective GSK-3 inhibitor	1616
Heat Shock Proteins			
Inhibitors	17-AAG	Selective Hsp90 inhibitor	1515
	Gedunin	Hsp90 inhibitor; exhibits anticancer and antimalarial activity	3387
	Geldanamycin	Selective Hsp90 inhibitor	1368
	PU H71	Potent Hsp90 inhibitor	3104
	VER 155008	Hsp70 inhibitor	3803
HIF			
Activators	ML 228	HIF pathway activator	4565
Inhibitors	IOX 2	Potent, selective HIF-1α prolyl hydroxylase-2 (PHD2) inhibitor	4451
	Echinomycin	Highly potent and selective HIF-1α inhibitor	5520
	PX 12	Thioredoxin-1 inhibitor	2954
Insulin and Insulin-like Receptors			
Activators	Insulin (human) recombinant	Endogenous peptide agonist	3435
Inhibitors	BMS 536924	Dual IR/IGF1R inhibitor	4774
	Picropodophyllotoxin	Selective IGF1R inhibitor	2956
Other	6bK	Insulin degrading enzyme (IDE) inhibitor	5402

Category	Product Name	Description	Catalog #
LIMK			
Inhibitors	LIMKi 3	Potent LIM kinase inhibitor; antitumor	4745
	SR 7826	Potent and selective LIMK inhibitor; antitumor	5626
	T 5601640	Selective LIMK2 inhibitor; antitumor	5269
Monopolar Spindle 1 Kinase			
Inhibitors	AZ 3146	Potent and selective Mps1 kinase inhibitor	3994
	Mps BAY 2a	Potent and selective Mps1 kinase inhibitor	5562
	TC Mps1 12	Potent and selective Mps1 kinase inhibitor	4750
mTOR			
Inhibitors	PI 103	Inhibitor of PI 3-kinase, mTOR and DNA-PK	2930
	PP 242	Dual mTORC1/mTORC2 inhibitor	4257
	Rapamycin	mTOR inhibitor; immunosuppressant	1292
	Torin 1	Potent and selective mTOR inhibitor	4247
PI 3-Kinase			
Activators	740 Y-P	Cell-permeable PI 3-kinase activator	1983
Inhibitors	A66	Potent and selective PI 3-kinase p110α inhibitor	5595
	LY 294002	Selective PI 3-kinase inhibitor	1130
	Wortmannin	Potent, irreversible inhibitor of PI 3-kinase. Also inhibitor of PLK1	1232
RSK			
Inhibitors	PF 4708671	S6K1 inhibitor	4032
	SL 0101-1	Selective p90 ribosomal S6 kinase (RSK) inhibitor	2250
Trk Receptors			
Agonists	7,8-Dihydroxyflavone	TrkB agonist	3826
	BDNF (human)	Activates TrkB and p75 receptors	2837
	LM 22A4	Potent TrkB agonist	4607
VEGFR			
Inhibitors	Axitinib	Potent VEGFR-1, -2 and -3 inhibitor	4350
	SU 5416	VEGFR inhibitor; also inhibits KIT, RET, MET and FLT3	3037
	Sunitinib	Potent VEGFR, PDGFRβ and KIT inhibitor	3768
	Vatalanib	Potent VEGFR inhibitor; also aromatase inhibitor	5680
Tocriscreen Collections			
	Tocriscreen Total	1120 biologically active compounds pre-dissolved in DMSO (250 µl 10mM solutions)	2884
	Tocriscreen Mini	1120 biologically active compounds pre-dissolved in DMSO (50 µl 10mM solutions)	2890
	Tocriscreen Kinase Inhibitor Toolbox	80 Kinase inhibitors supplied pre-dissolved in DMSO (250 µl 10mM solutions)	3514
	Tocriscreen Stem Cell Toolbox	80 Stem Cell modulators supplied pre-dissolved in DMSO (250 µl 10 mM solutions)	5060
	Tocriscreen Epigenetics Toolbox	80 Epigenetic modulators supplied pre-dissolved in DMSO (250 µL 10 mM solutions)	5268
Ligand Sets			
	MEK Inhibitor Tocriset	Selection of 3 MEK inhibitors (U0126, PD98059 and SL 327)	2243

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bio-techne®
Global info@bio-techne.com bio-techne.com/find-us/distributors TEL +1 612 379 2956
North America TEL 800 343 7475 **Europe | Middle East | Africa** TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
bio-techne.com