

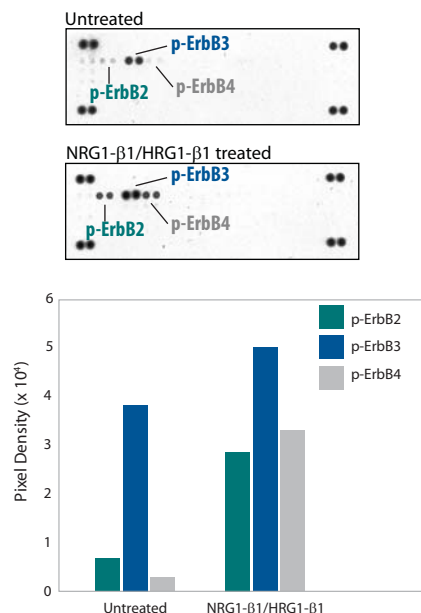
Receptor Tyrosine Kinases

Receptor Tyrosine Kinases (RTKs) contain an extracellular ligand-binding domain connected through a single transmembrane helix to a cytoplasmic kinase domain. In addition to the conserved protein tyrosine kinase core, an RTK's cytoplasmic domain contains regulatory regions subject to tyrosine autophosphorylation. These autophosphorylation sites provide a mechanism for the recognition of Src homology 2 (SH2) and phosphotyrosine binding (PTB) domains present on a variety of signaling proteins. Among these are components of the Raf/MEK/ERK and PI 3-kinase/PDK1/Akt signaling cascades.

Receptor Tyrosine Kinase Products							
ANALYTE	ANTIBODIES	ELISAs/ASSAYS	PROTEINS	ANALYTE	ANTIBODIES	ELISAs/ASSAYS	PROTEINS
ALK/CD246	H			M-CSF R	H	H	H
Axl	H M	H M	H M	Mer	H M		H M
DDR1/ DDR2	H			MSP R/Ron	H M		H M
EGF R	H M	H	H	MuSK	R		
Eph	Please see website for our complete product line.			PDGF R α , R β	H M	H	H M
ErbB2, B3, B4	H		H	Ret	H M		H M
FGF R1	H		H	ROR1, ROR2	H		
FGF R2, FGF R3	H M	H	H M	SCF R/c-kit	H M	H	H
FGF R4	H M		H	Tie-1	H		H
Flt-3	H M		H M	Tie-2	H M Z	H M	H M Z
HGF R	H M	H M	H M	TrkA	H R	H	H R
IGF-I R	H	H	H	TrkB, C	H M		H M
IGF-II R	H		H	VEGF R1, R2, R3	H M	H M	H M
INSRR	H			TrkC	H M		H M
Insulin R/CD220	H	H	H				

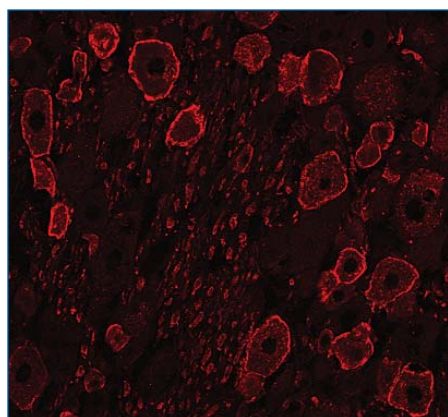
Key: H Human M Mouse R Rat Z Zebrafish

Receptor Tyrosine Kinase Array



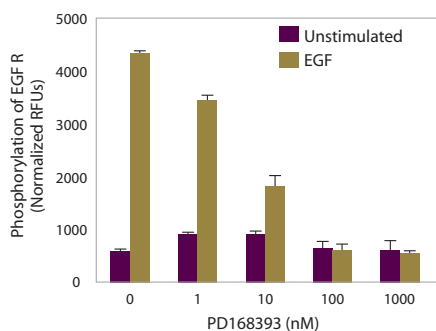
Relative phosphorylation was measured simultaneously in 42 RTKs using the Proteome Profiler™ RTK Array (Catalog # ARY001). MDA-MB-453 cells (human breast cancer) were left untreated or treated with recombinant human NRG1-β1/HRG1-β1 (Catalog # 396-HB).

TrkA in Rat DRG Neurons



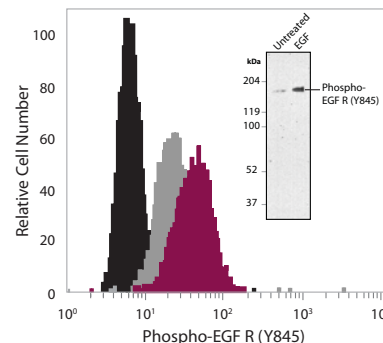
Detection of TrkA receptor in rat DRG neurons using R&D Systems goat anti-rat TrkA receptor affinity-purified antibody (Catalog # AF1056). Tissues were stained using donkey anti-goat secondary antibodies conjugated to Rhodamine Red™ X (red). TrkA receptor labeling is confined to the plasma membrane of DRG neurons.

Phospho-EGF R Cell-Based Assay



Phosphorylation of EGF R (Y1068) was determined in whole cells using the human Phospho-EGF R (Y1068) Cell-Based ELISA Kit (Catalog # KCB1095) and normalized to total EGF R in the same well. A431 cells (epidermoid carcinoma) were pretreated with PD168393 (tyrosine kinase inhibitor), and then incubated with or without EGF (Catalog # 236-EG). Values represent mean ± the range of duplicate determinations.

Phospho-EGF R by Flow Cytometry



A431 cells were untreated (gray histogram) or treated with EGF (red histogram). Phosphorylated EGF R was detected by flow cytometry using carboxyfluorescein (CF5)-conjugated anti-phospho-EGF R (Y845) antibody (Catalog # IC3394F). Cells were also stained with an isotype control antibody (Catalog # IC105F; black histogram). The inset shows Western blot detection of phosphorylated EGF R using anti-human phospho-EGF R (Y845) polyclonal antibody (Catalog # AF3394).

Rhodamine Red is a trademark of Molecular Probes.