AB-PK959

p38-pY182 Antibody

Phosphosite-specific rabbit polyclonal antibody for p38α MAPK (MAPK14; CSBP; MXI2; SAPK2a). This phosphotyrosine-site antibody is highly specific for phosphotyrosine.

Website: www.kinexus.ca
Email: info@kinexus.ca
Phone: 604-323-2547

Address: 8755 Ash Street, Suite 1
Vancouver, British Columbia,
Canada V6P 6T3

Target Protein

Protein Name Long:	Mitogen-activated protein-serine kinase p38 beta; Mitogen-activated protein kinase 11
Protein Alias:	MAPK11; MK11; P38 MAPK-beta; P38-2; P38b; PRKM11; SAPK2; Stress-activated protein kinase-2; p28b MARPK; p38Beta; CCDS14090.1; Q15759; ENSG00000185386
UniProt ID:	Q15759
Protein Molecular Mass:	41,357 Da (372 AA; Q15759); 23,603 Da (213 AA; Q15759-3)

Immunogen

Antibody Immunogen Source:	Synthetic phosphopeptide patterned after human p38
Antibody Immunogen Sequence:	C(βA)EMTG(pY)VAT
Antibody Immunogen Description:	Corresponds to amino acid residues E178 to T185. Y182 phosphorylation is stimulatory for phosphotransferase activity. This phosphosite is located in the kinase activation loop between catalytic subdomains VII and VIII. This is one of two of the major *in vivo* phosphorylation sites in p38a (≥3744 reports by mass spectrometry). p38a MAPK is known to be phosphorylated at this site *in vitro* by ASK1 (MAP3K5), MEKK6 (MAP3K6, ASK2), MKK3 (MAP2K3, MEK3), MKK4 (MAP2K4, MEK4), MKK6 (MAP2K6, MEK6), p38a MAPK (MAPK14), PBK (TOPK), and Ret.
Antibody Target Type:	Phosphosite-specific

Production

Antibody Host Species:	Rabbit
Antibody Type:	Polyclonal
Antibody Isotype:	IgG
Production Method:	The immunizing peptide was produced by solid phase synthesis on a multipep peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris.
Amount:	25 µg
Antibody Concentration:	0.6 mg/ml
Storage Buffer:	Phosphate buffered saline pH 7.4, 0.05% Thimerasol
Storage Conditions:	For long term storage, keep frozen at -40°C or lower. Stock solution can be kept at +4°C for more than 3 months. Avoid repeated freeze-thaw cycles.
Storage Stability:	>2 years

Applications

Product Use:	Western blotting | Antibody microarray
Antibody Dilution Recommended:	2 µg/ml for immunoblotting
Antibody Species Reactivity:	Human | Chimpanzee | Rhesus Macaque | Dog | Rat | Mouse | Platypus | Chicken | Frog | Fruit fly | Honey bee | Zebra fish | Nematode worm | Red bread mold
Antibody Positive Control:	The observed molecular mass of the processed target protein on SDS-PAGE gels is reported to be around 40-48 kDa.