E9P005

Phospho-MAPK14-T180-pPolyclonal Antibody

Catalog Number: E9P0056
Amount: 100ul
Background: p38 MAP kinase (MAPK), also called RK (1) or CSBP (2), is the mammalian orthologue of the yeast HOG kinase that participates in a signaling cascade controlling cellular responses to cytokines and stress (1-4). Four isoforms of p38 MAPK, p38α, β, γ (also known as Erk6 or SAPK3), and δ (also known as SAPK4) have been identified. Similar to the SAPK/JNK pathway, p38 MAPK is activated by a variety of cellular stresses including osmotic shock, inflammatory cytokines, lipopolysaccharide (LPS), UV light, and growth factors (1-5). MKK3, MKK6, and SEK activate p38 MAPK by phosphorylation at Thr180 and Tyr182. Activated p38 MAPK has been shown to phosphorylate and activate MAPKAP kinase 2 (3) and to phosphorylate the transcription factors ATF-2 (5), Max (6), and MEF2 (5-8).SB203580 (4-(4-fluorophenyl)-2-(4-methylsulfinylphenyl)-5-(4-pyridyl)-imidazole) is a selective inhibitor of p38 MAPK. This compound inhibits the activation of MAPKAPK-2 by p38 MAPK and subsequent phosphorylation of HSP27 (9). SB203580 inhibits p38 MAPK catalytic activity by binding to the ATP-binding pocket, but does not inhibit phosphorylation of p38 MAPK by upstream kinases (10).
Species: Rabbit
Isotype: IgG
Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Synonyms: RK; p38; CSBP; EXIP; Mxi2; CSBP1; CSBP2; CSPB1; PRKM14; PRKM15 SAPK2A; p38ALPHA;
Immunogen: A phospho specific peptide corresponding to residues surrounding T180 of human MAPK14
Purification: Affinity purification
Reactivity: H M R
Applications: WB
Molecular Weight:
Swiss-Prot No. : Q16539
Gene ID: 1432
References: 1. Rouse, J. et al. (1994) Cell 78, 1027-1037. 2. Han, J. et al. (1994) Science 265, 808-811. 3. Lee, J.C. et al. (1994) Nature 372, 739-746. 4. Freshney, N.W. et al. (1994) Cell 78, 1039-1049. 5. Raingeaud, J. et al. (1995) J. Biol. Chem. 270, 7420-7426. 6. Zervos, A.S. et al. (1995) Proc. Natl. Acad. Sci. USA 92, 10531-10534. 7. Zhao, M. et al. (1999) Mol. Cell. Biol. 19, 21-30. 8. Yang, S.H. et al. (1999) Mol. Cell. Biol. 19, 4028-4038. 9. Cuenda, A. et al. (1995) FEBS Lett 364, 229-33. 10. Kumar, S. et al. (1999) Biochem Biophys Res Commun 263, 825-31.

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