

## Polyclonal Antibody to Human p38 (HOG1 Homologue)

<b>Catalog No.:</b>	SP7135P
<b>Quantity:</b>	0.1 mg
<b>Host:</b>	Rabbit
<b>Immunogen:</b>	A 20 residue synthetic peptide (C)TYDEVISFVPPPLDQEEMES based on the human p38 (residues 341-360) (1) with the cysteine (C) residue added and the peptide coupled to KLH. This sequence is identical to mouse p38 over these residues.
<b>Applications:</b>	Western blot: 2 µg/ml. This immunoaffinity purified antibody detects approximately 43 kDa protein, corresponding to the apparent molecular mass of p38 (HOG1) on SDS-PAGE immunoblots, in various samples. Jurkat cells can be used as positive control. Optimal dilutions of this antibody are dependent on conditions and should be determined by the user. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	p38 (HOG1), also known as SAPK-2, reactivating kinase or cytokine-suppressive binding protein, is a mouse 38 kDa serine threonine kinase that belongs to the mitogen-activated protein kinase family (1). p38 is identified as one of the major tyrosine-phosphorylated proteins in mouse monocyte cell lines upon lipopolysaccharide (LPS) treatment (2). Human homolog of p38 binds to cytokines suppressive anti-inflammatory drugs (CSAIDs), an anti-inflammatory drug that inhibits IL-1 and TNF-α synthesis (1). HOG1, the yeast homolog of p38, is stimulated by osmotic shock (3). p38 is activated by MAPK kinase MKK3 and Sek1/MKK4, the latter kinase is also involved in the activation of the stress-activated protein kinase pathway (4). In LPS-treated monocytic cells, the activity of a transcription activators called myocyte-enhancer factor 2 (MEF2) is increased through p38-catalysed phosphorylation, which results in increased c-jun gene transcription (5). p38 also activates MAPKAP kinase 2 in IL-1-stimulated cells (6). Reacts with Mouse, Human, Rat, Dog, Pufferfish, Bovine, Chicken.
<b>Storage:</b>	Store frozen product at or below -20°C. Thawed product may be stored for 2-4 weeks at 4°C. For optimal storage, aliquot to smaller portions and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles. For maximum product recovery, after thawing, centrifuge the product vial before removing cap. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Brewster, J. L. (1993) Science 259: 1760-1763. 2. Derijard, B., et al. (1995) Science 267: 682-685. 3. Han, J. et al. (1997) Nature 386: 296-299. 4. Freshney, N.W. et al (1995) Cell 78: 1039-1049. 5. Lee, J. C., et al. (1994) Nature 372: 739-746. 6. Han, J., Bibbs, L., and Ulevitch, R. J. (1994) Science 265: 808-811. 7. Ciesielski-Treska, J.; Ulrich, G.; Chasserot-Golaz, S.; Zwiller, J.; Revel, M.O.; Aunis, D.; Bader, M.F.; (2001) J Biol Chem 276(16): 13113-13120.

