

# Goat Anti-DUSP10 / MKP5 Antibody

Peptide-affinity purified goat antibody Catalog # AF1344a

### Specification

# Goat Anti-DUSP10 / MKP5 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW

WB, E <u>Q9Y6W6</u> <u>NP\_653330</u>, <u>11221</u> Human Mouse, Rat, Dog Goat Polyclonal 100ug/200ul IgG 52642

# Goat Anti-DUSP10 / MKP5 Antibody - Additional Information

Gene ID 11221

**Other Names** Dual specificity protein phosphatase 10, 3.1.3.16, 3.1.3.48, Mitogen-activated protein kinase phosphatase 5, MAP kinase phosphatase 5, MKP-5, DUSP10, MKP5

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-DUSP10 / MKP5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-DUSP10 / MKP5 Antibody - Protein Information

Name DUSP10

Synonyms MKP5



Function

Protein phosphatase involved in the inactivation of MAP kinases. Has a specificity for the MAPK11/MAPK12/MAPK13/MAPK14 subfamily. It preferably dephosphorylates p38.

Cellular Location Cytoplasm. Nucleus.

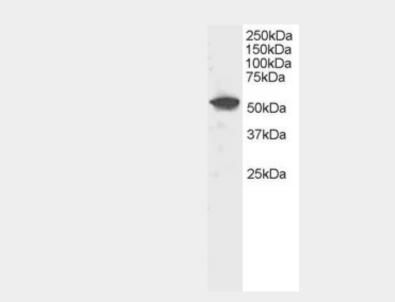
**Tissue Location** Expressed in keratinocytes (at protein level) (PubMed:29043977). Detected in brain (PubMed:16806267)

# Goat Anti-DUSP10 / MKP5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Goat Anti-DUSP10 / MKP5 Antibody - Images



AF1344a staining (0.5  $\mu$ g/ml) of Human Liver lysate (RIPA buffer, 30  $\mu$ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

# Goat Anti-DUSP10 / MKP5 Antibody - Background

Dual specificity protein phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the MAPK superfamily (MAPK/ERK, SAPK/JNK, p38), which is associated with cellular proliferation and differentiation. Different members of this family of dual specificity phosphatases show distinct substrate specificities for MAPKs, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product binds



to and inactivates p38 and SAPK/JNK, but not MAPK/ERK. Its subcellular localization is unique; it is evenly distributed in both the cytoplasm and the nucleus. This gene is widely expressed in various tissues and organs, and its expression is elevated by stress stimuli. Three transcript variants encoding two different isoforms have been found for this gene.

# Goat Anti-DUSP10 / MKP5 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.

Asbestos-induced MKP-3 expression augments TNF-alpha gene expression in human monocytes. Tephly LA, et al. Am J Respir Cell Mol Biol, 2008 Jul. PMID 18314537.

Several dual specificity phosphatases coordinate to control the magnitude and duration of JNK activation in signaling response to oxidative stress. Teng CH, et al. J Biol Chem, 2007 Sep 28. PMID 17681939.