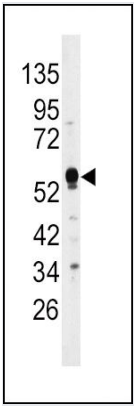
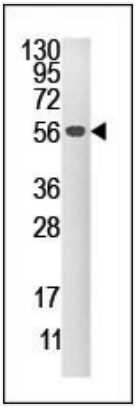
DUSP4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

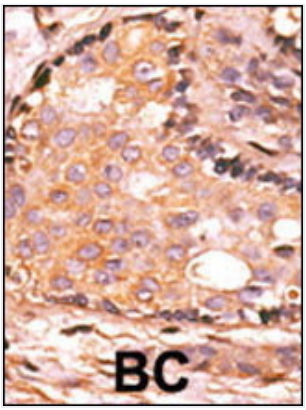
Product Name	DUSP4, Polyclonal Antibody
Full Product Name	DUSP4, CT (Dual Specificity Protein Phosphatase 4, Dual Specificity Protein Phosphatase hVH2, HVH2, Mitogen-activated Protein Kinase Phosphatase 2, MAP Kinase Phosphatase 2, MKP2, MKP-2, TYP, VH2) (Biotin)
Product Gene Name	anti-DUSP4 antibody
Product Synonym Names	Dual Specificity Phosphatase 4; EC=3.1.3.16; EC=3.1.3.48
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Biotin.
Purity/Purification	Purified by Protein A/G Affinity Chromatography.
Specificity	Recognizes human DUSP4. Species Crossreactivity: mouse
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	43kDa
OMIM	602747
3D Structure	ModBase 3D Structure for Q13115
Immunogen	KLH-conjugated synthetic peptide mapping to a fragment of residues within amino acids 331-361 in the C-terminal region of human DUSP4, UniProt Accession #Q13115.
Conjugate	Biotin
Note	Preservative Free
Product Categories/Family for anti-DUSP4 antibody	Antibodies; Enzymes; Phosphatase
Applications Tested/Suitable for anti-DUSP4 antibody	Immunohistochemistry (IHC) Paraffin, ELISA (EIA), Western Blot (WB)
Application Notes for anti-DUSP4 antibody	Applications are based on unconjugated antibody.
Related Product Information for anti-DUSP4 antibody	MBS6473135 is an antibody targeting DUSP4. Also known as DUSP4, CT (Dual Specificity Protein Phosphatase 4, Dual Specificity Protein Phosphatase hVH2, HVH2, Mitogen-activated Protein Kinase Phosphatase 2, MAP Kinase Phosphatase 2, MKP2, MKP-2, TYP, VH2) (Biotin). Reactive in Human, Mouse. Host: Rabbit.
Product References and Citations for anti-DUSP4 antibody	1. Chen, P., et al., J. Biol. Chem. 276(31):29440-29449 (2001). 2. Smith, A., et al., Genomics 42(3):524-527 (1997). 3. Chu, Y., et al., J. Biol. Chem. 271(11):6497-6501 (1996). 4. King, A.G., et al., Oncogene 11(12):2553-2563 (1995). 5. Guan, K.L., et al., J. Biol. Chem. 270(13):7197-7203 (1995).
Other Notes	Small volumes of anti-DUSP4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-DUSP4 antibody
Western Blot analysis of HepG2 cell line lysates (35ug/lane) usingMBS627884. DUSP4 (arrow) was detected usingMBS627884.



Western Blot (WB) of anti-DUSP4 antibody
Western Blot analysis of mouse brain tissue lysate (35ug/lane) usingMBS627884. DUSP4(arrow) was detected usingMBS627884.



Immunohistochemistry (IHC) of anti-DUSP4 antibody
Formalin-fixed and paraffin-embedded human cancer tissue reacted withMBS627884, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. BC = breast carcinoma; HC = hepatocarcinoma.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DUSP4. It may not necessarily be applicable to this product.

NCBI GI #	4503417
NCBI GeneID	1846
NCBI Accession #	NP_001385
UniProt Primary Accession #	Q13115
UniProt Related Accession #	Q13115
GenBank Nucleotide #	NM_001394
NCBI Official Full Name	dual specificity protein phosphatase 4 isoform 1
NCBI Official Synonym Full Names	dual specificity phosphatase 4
NCBI Official Symbol	DUSP4
NCBI Official Synonym Symbols	TYP; HVH2; MKP2; MKP-2
UniProt Protein Name	Dual specificity protein phosphatase 4
UniProt Synonym Protein Names	Dual specificity protein phosphatase hVH2; Mitogen-activated protein kinase phosphatase 2; MAP kinase phosphatase 2; MKP-2
Protein Family	Dual specificity protein phosphatase

UniProt Gene Name	DUSP4
UniProt Synonym Gene Names	MKP2; VH2; MAP kinase phosphatase 2; MKP-2
UniProt Entry Name	DUS4_HUMAN
NCBI Protein Information	dual specificity protein phosphatase 4
NCBI Summary for DUSP4	The protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product inactivates ERK1, ERK2 and JNK, is expressed in a variety of tissues, and is localized in the nucleus. Two alternatively spliced transcript variants, encoding distinct isoforms, have been observed for this gene. In addition, multiple polyadenylation sites have been reported. [provided by RefSeq, Jul 2008]
UniProt Comments for DUSP4	MKP-2: a non-receptor, dual-specificity phosphoprotein phosphatase (DUSP). Different members of the DUSP family show distinct substrate specificities for MAPKs, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. DUSP4 inactivates ERK1, ERK2 and JNK, is expressed in a variety of tissues, and is localized in the nucleus. Induced by hepatocyte growth factor (HGF) and vascular endothelial cell growth factor (VEGF) in human endothelial cells. Two alternatively spliced isoforms have been described. In addition, multiple polyadenylation sites have been reported. Contains 1 rhodanese domain. Protein type: Protein phosphatase, dual-specificity; EC 3.1.3.48; EC 3.1.3.16 Chromosomal Location of Human Ortholog: 8p12-p11 Cellular Component: nucleoplasm; nucleus Molecular Function: protein tyrosine/threonine phosphatase activity; protein tyrosine/serine/threonine phosphatase activity; protein tyrosine phosphatase activity; MAP kinase tyrosine/serine/threonine phosphatase activity Biological Process: nerve growth factor receptor signaling pathway; MyD88-independent toll-like receptor signaling pathway; stress-activated MAPK cascade; MAPKKK cascade; toll-like receptor 3 signaling pathway; protein amino acid dephosphorylation; toll-like receptor 2 signaling pathway; toll-like receptor 10 signaling pathway; toll-like receptor 5 signaling pathway; MyD88-dependent toll-like receptor signaling pathway; endoderm formation; toll-like receptor signaling pathway; innate immune response; toll-like receptor 9 signaling pathway; toll-like receptor 4 signaling pathway; inactivation of MAPK activity
Research Articles on DUSP4	**1.** This study was aimed to investigate the correlation of dual-specificity phosphatase 4 (DUSP4) expression with clinicopathologic features and overall survival in patients with GC and explore the effects of sanguinarine on tumour growth and invasion in GC cells (SGC-7901 and HGC-27) and underlying molecular mechanisms
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