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DUSP5 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant DUSP5.
Catalog # AT1829a

Product Information

Application	WB, IF, E
Primary Accession	Q16690
Other Accession	NM_004419
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	2F3
Calculated MW	42047

Additional Information

Gene ID	1847
Other Names	Dual specificity protein phosphatase 5, Dual specificity protein phosphatase hVH3, DUSP5, VH3
Target/Specificity	DUSP5 (NP_004410, 286 a.a. ~ 384 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	DUSP5 Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

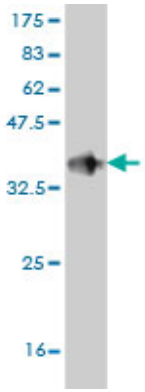
Background

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, is expressed in a variety of tissues with the highest levels in pancreas and brain, and is localized in the nucleus.

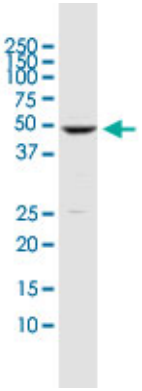
References

Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624.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.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.Macrophage differentiation of myeloid progenitor cells in response to M-CSF is regulated by the dual-specificity phosphatase DUSP5. Grasset MF, et al. J Leukoc Biol, 2010 Jan. PMID 19801501.Dusp-5 and Snrk-1 coordinately function during vascular development and disease. Pramanik K, et al. Blood, 2009 Jan 29. PMID 18927432.

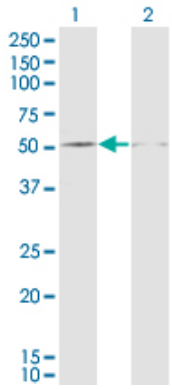
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .



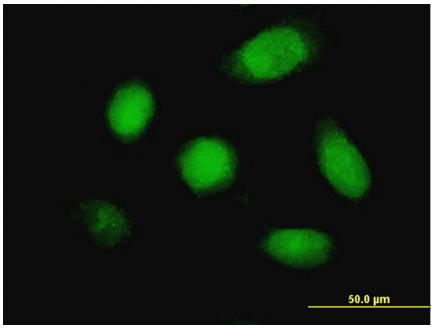
DUSP5 monoclonal antibody (M04), clone 2F3 Western Blot analysis of DUSP5 expression in K-562 ((Cat # AT1829a)

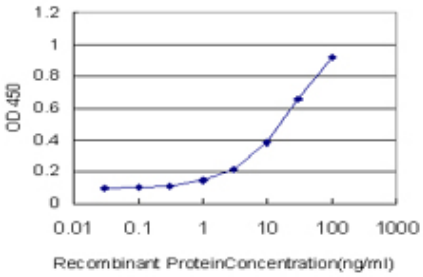


Western Blot analysis of DUSP5 expression in transfected 293T cell line by DUSP5 monoclonal antibody (M04), clone 2F3.

Lane 1: DUSP5 transfected lysate (Predicted MW: 42.1 KDa).
Lane 2: Non-transfected lysate.

Immunofluorescence of monoclonal antibody to DUSP5 on HeLa cell. [antibody concentration 10 ug/ml]





Detection limit for recombinant GST tagged DUSP5 is approximately 1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.