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DUSP6 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8449a

Product Information

Application	IHC-P-Leica, IF, WB, E
Primary Accession	Q16828
Other Accession	Q2KJ36, NP_001937
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB05814
Calculated MW	42320
Antigen Region	58-89

Additional Information

Gene ID	1848
Other Names	Dual specificity protein phosphatase 6, Dual specificity protein phosphatase PYST1, Mitogen-activated protein kinase phosphatase 3, MAP kinase phosphatase 3, MKP-3, DUSP6, MKP3, PYST1
Target/Specificity	This DUSP6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-89 amino acids from the Central region of human DUSP6.
Dilution	IHC-P-Leica~~1:500 IF~~1:10~50 WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DUSP6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DUSP6

Synonyms	MKP3, PYST1
Function	Dual specificity protein phosphatase, which mediates dephosphorylation and inactivation of MAP kinases (PubMed:8670865). Has a specificity for the ERK family (PubMed:8670865). Plays an important role in alleviating chronic postoperative pain (By similarity). Necessary for the normal dephosphorylation of the long-lasting phosphorylated forms of spinal MAPK1/3 and MAP kinase p38 induced by peripheral surgery, which drives the resolution of acute postoperative allodynia (By similarity). Also important for dephosphorylation of MAPK1/3 in local wound tissue, which further contributes to resolution of acute pain (By similarity). Promotes cell differentiation by regulating MAPK1/MAPK3 activity and regulating the expression of AP1 transcription factors (PubMed:29043977).
Cellular Location	Cytoplasm.
Tissue Location	Expressed in keratinocytes (at protein level).

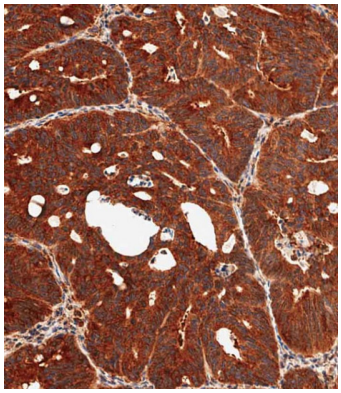
Background

DUSP6 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 ERK2, is expressed in a variety of tissues with the highest levels in heart and pancreas, and unlike most other members of this family, is localized in the cytoplasm. Two transcript variants encoding different isoforms have been found for the DUSP6 gene.

References

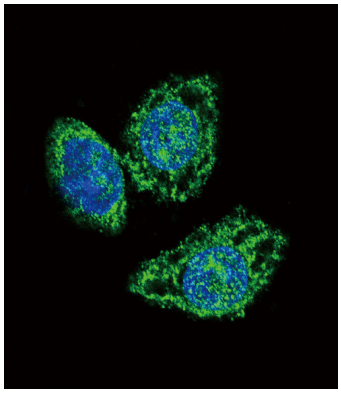
Mod. Pathol. 18 (8), 1034-1042 (2005)
J. Hum. Genet. 50 (4), 159-167 (2005)
J. Biol. Chem. 279 (40), 41882-41891 (2004)
Biochemistry 42 (51), 15197-15207 (2003)
J. Biol. Chem. 271 (8), 4319-4326 (1996)

Images

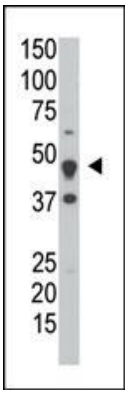


Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using AP8449a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

Confocal immunofluorescent analysis of DUSP6 Antibody (Center) (Cat#AP8449a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI



was used to stain the cell nuclear (blue).



The anti-DUSP6 Pab (Cat. #AP8449a) is used in Western blot to detect DUSP6 in HeLa cell lysate.

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