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DUSP8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8451a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q13202
Other Accession	O09112, NP_004411
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5872
Calculated MW	65827
Antigen Region	1-30

Additional Information

Gene ID	1850
Other Names	Dual specificity protein phosphatase 8, Dual specificity protein phosphatase hVH-5, DUSP8, C11orf81, VH5
Target/Specificity	This DUSP8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human DUSP8.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	DUSP8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DUSP8
Synonyms	C11orf81, VH5
Function	Has phosphatase activity with synthetic phosphatase substrates and

	negatively regulates mitogen-activated protein kinase activity, presumably by catalysing their dephosphorylation. Expected to display protein phosphatase activity toward phosphotyrosine, phosphoserine and phosphothreonine residues.
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:O09112}. Nucleus {ECO:0000250|UniProtKB:O09112}
Tissue Location	Abundant in brain, heart and skeletal muscle.

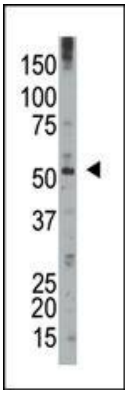
Background

DUSP8 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 is 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. DUSP8 inactivates SAPK/JNK and p38, is expressed predominantly in the adult brain, heart, and skeletal muscle, is localized in the cytoplasm, and is induced by nerve growth factor and insulin.

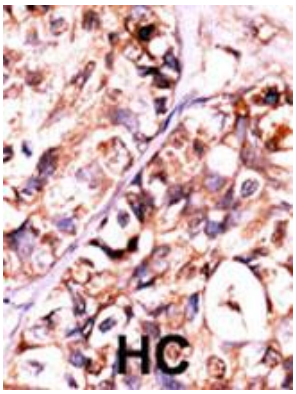
References

Berger, I.R., et al., Cancer Genet. Cytogenet. 159(2):155-159 (2005). Hink, R.L., et al., Genomics 8(3):305-312 (2003). Nesbit, M.A., et al., Genomics 42(2):284-294 (1997). Martell, K.J., et al., J. Neurochem. 65(4):1823-1833 (1995).

Images



The anti-DUSP8 Pab (Cat. #AP8451a) is used in Western blot to detect DUSP8 in mouse brain cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Citations

- Prevention of JNK phosphorylation as a mechanism for rosiglitazone in neuroprotection after transient cerebral ischemia: activation of dual specificity phosphatase.