10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DUSP3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8478a

Product Information

Application	WB, IHC-P, E
Primary Accession	P51452
Other Accession	Q9D7X3
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	20478
Antigen Region	1-30

Additional Information

Gene ID	1845
Other Names	Dual specificity protein phosphatase 3, Dual specificity protein phosphatase VHR, Vaccinia H1-related phosphatase, VHR, DUSP3, VHR
Target/Specificity	This DUSP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human DUSP3.
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	DUSP3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DUSP3
Synonyms	VHR
Function	Shows activity both for tyrosine-protein phosphate and serine-protein

phosphate, but displays a strong preference toward phosphotyrosines (PubMed:10224087, PubMed:11863439). Specifically dephosphorylates and inactivates ERK1 and ERK2 (PubMed:10224087, PubMed:11863439).

Cellular Location Nucleus. Cytoplasm, cytoskeleton, flagellum axoneme {ECO:0000250|UniProtKB:Q9D7X3}

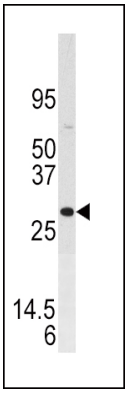
Background

DUSP3 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.

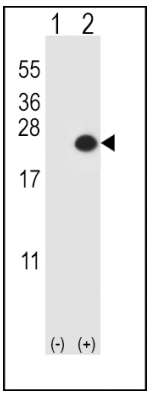
References

Alonso, A., et al., Nat. Immunol. 4(1):44-48 (2003).
Alonso, A., et al., J. Biol. Chem. 276(7):4766-4771 (2001).
Todd, J.L., et al., J. Biol. Chem. 274(19):13271-13280 (1999).
Kamb, A., et al., Genomics 23(1):163-167 (1994).
Folander, K., et al., Genomics 23(1):295-296 (1994).

Images

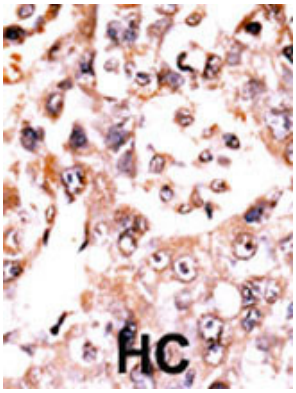


Western blot analysis of anti-DUSP3 Pab (Cat. #AP8478a) in SK-BR-3 cell line lysate.DUSP3(arrow) was detected using the purified Pab.



Western blot analysis of DUSP3 (arrow) using rabbit polyclonal DUSP3 Antibody (E6) (Cat. #AP8478a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the DUSP3 gene.

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

- Vaccinia H1-related phosphatase is a phosphatase of ErbB receptors and is down-regulated in non-small cell lung cancer.

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