

Anti-DUSP3 Antibody
Catalog # ABO11071**Specification**

Anti-DUSP3 Antibody - Product Information

Application	WB
Primary Accession	P51452
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Dual specificity protein phosphatase 3(DUSP3) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-DUSP3 Antibody - Additional Information

Gene ID 1845

Other Names

Dual specificity protein phosphatase 3, 3.1.3.16, 3.1.3.48, Dual specificity protein phosphatase VHR, Vaccinia H1-related phosphatase, VHR, DUSP3, VHR

Calculated MW

20478 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Nucleus .

Protein Name

Dual specificity protein phosphatase 3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human DUSP3(155-171aa RQNREIGPNDGFLAQLC), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the protein-tyrosine phosphatase family. Non-receptor class dual specificity subfamily.

Anti-DUSP3 Antibody - 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](http://www.uniprot.org/citations/10224087), PubMed: [11863439](http://www.uniprot.org/citations/11863439)). Specifically dephosphorylates and inactivates ERK1 and ERK2 (PubMed: [10224087](http://www.uniprot.org/citations/10224087), PubMed: [11863439](http://www.uniprot.org/citations/11863439)).

Cellular Location

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

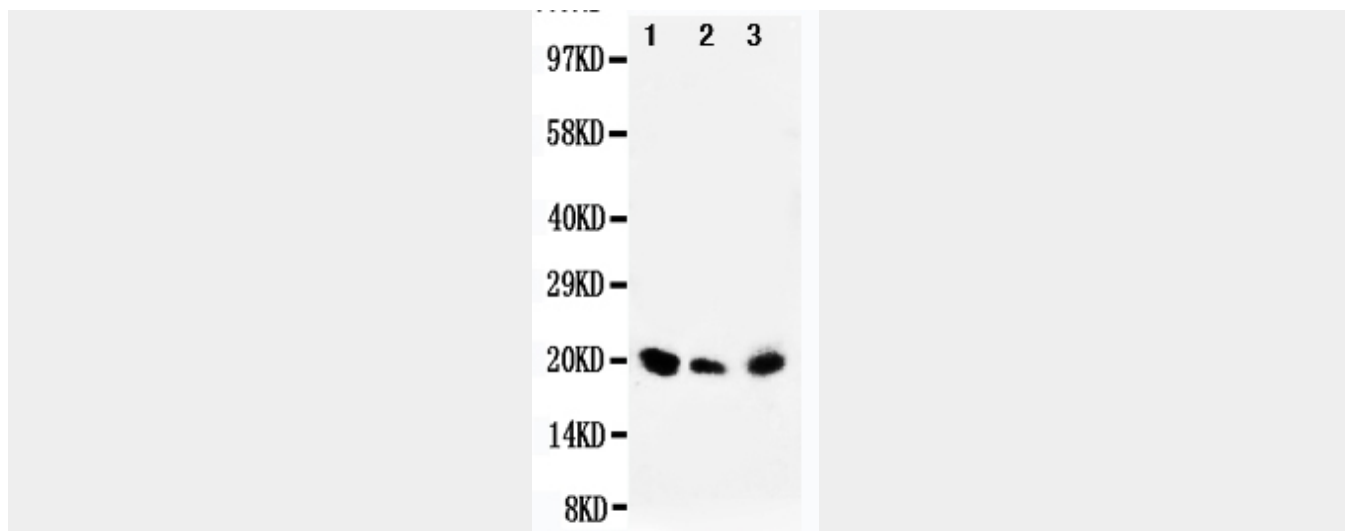
Anti-DUSP3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-DUSP3 Antibody - Images





Anti-DUSP3 antibody, ABO11071, Western blotting Lane 1: Rat Testis Tissue Lysate Lane 2: SKOV Cell Lysate Lane 3: MM453 Cell Lysate

Anti-DUSP3 Antibody - Background

DUSP3 (Dual-specificity phosphatase 3), also called VHR, is a member of the dual specificity protein phosphatase subfamily. DUSPs constitute a large heterogeneous subgroup of the type I cysteine-based protein-tyrosine phosphatase superfamily. DUSPs are characterized by their ability to dephosphorylate both tyrosine and serine/threonine residues. DUSP3 contains the consensus DUSP C-terminal catalytic domain but lacks the N-terminal CH2 domain found in the MKP (mitogen-activated protein kinase phosphatase) class of DUSPs. The DUSP3 gene is mapped on 17q21.31. Confocal microscopy demonstrated that phosphorylated VHR accumulated at the immune synapse between the T cell and the antigen-presenting cell in the presence of antigen. Tyrosine phosphorylation of VHR affects protein-protein interaction, subcellular location, or substrate targeting, given that tyr138 is located on the opposite side of the VHR catalytic center.