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

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 r˚Constitution, 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, PubMed:11863439). Specifically dephosphorylates and inactivates ERK1 and ERK2 (PubMed:10224087, PubMed:11863439).

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

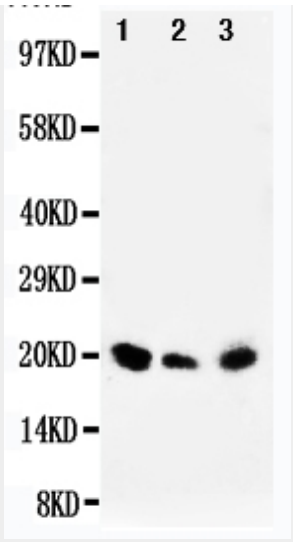
Anti-DUSP3 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-DUSP3 Antibody - Images

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



Anti-DUSP3 antibody, ABO11071, Western blottingLane 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.