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

DOCK8 Antibody
Catalog # ASC11810

Specification

DOCK8 Antibody - Product Information

Application	**WB, IHC-P, E**
Primary Accession	Q8NF50
Other Accession	NP_982272, 238231392
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 166, 220, 231 kDa** **Observed: 220, 230 kDa KDa**
Application Notes	**DOCK8 antibody can be used for detection of DOCK8 by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry at 5 µg/mL.**

DOCK8 Antibody - Additional Information

Gene ID **81704**

Target/Specificity
DOCK8; DOCK8 antibody is human, mouse and rat reactive. Multiple isoforms of DOCK8 are known to exist.

Reconstitution & Storage
DOCK8 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
DOCK8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DOCK8 Antibody - Protein Information

Name DOCK8

Function
Guanine nucleotide exchange factor (GEF) which specifically activates small GTPase CDC42 by exchanging bound GDP for free GTP (PubMed:22461490, PubMed:28028151). During immune responses, required for interstitial dendritic cell (DC) migration by locally activating CDC42 at the leading edge membrane of DC (By similarity). Required for CD4(+) T-cell migration in response to chemokine stimulation by promoting CDC42 activation at T cell leading edge membrane (PubMed:28028151). Is involved in NK cell cytotoxicity by controlling polarization of microtubule-organizing center (MTOC), and possibly regulating CCDC88B-mediated lytic granule

transport to MTOC during cell killing (PubMed:25762780).

Cellular Location
Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium membrane; Peripheral membrane protein; Cytoplasmic side. Note=Enriched and co-localizes with GTPase CDC42 at the immunological synapse formed during T cell/antigen presenting cell cognate interaction. Translocates from the cytoplasm to the plasma membrane in response to chemokine CXCL12/SDF-1-alpha stimulation

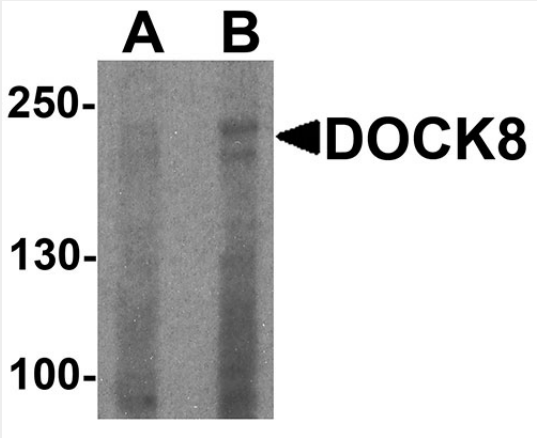
Tissue Location
Expressed in peripheral blood mononuclear cells (PBMCs).

DOCK8 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

DOCK8 Antibody - Images



Western blot analysis of DOCK8 in EL4 cell lysate with DOCK8 antibody at (A) 1 and (B) 2 µg/ml.

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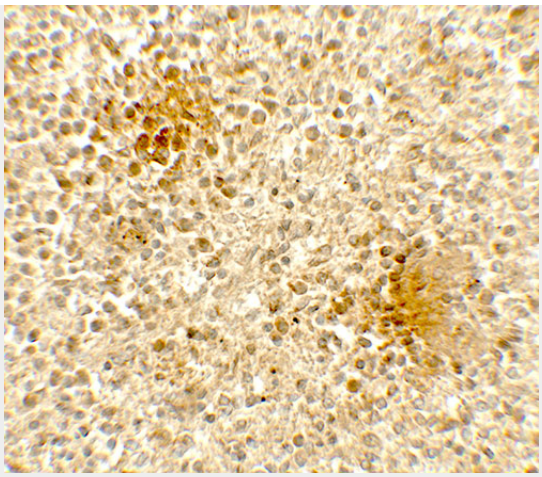

Immunohistochemistry of DOCK8 in human spleen tissue with DOCK8 antibody at 5 µg/mL.

DOCK8 Antibody - Background

The Dedicator of cytokinesis protein 8 (DOCK8) is a member of the DOCK180 family of guanine nucleotide exchange factors (1). DOCK8 plays an essential role in humoral immune responses and is important in the proper formation of the B cell immunological synapse (reviewed in 2). Mutations in this gene result in the autosomal recessive form of the hyper-IgE syndrome (3).

DOCK8 Antibody - References

Ruusala A and Aspenstrom P. Isolation and characterisation of DOCK8, a member of the DOCK180-related regulators of cell morphology. FEBS Lett. 2004; 572:159-66.
Randall KL, Lambe T, Goodnow CC, et al. The essential role of DOCK8 in humoral immunity. Dis. Markers 2010; 29:141-50.
Engelhardt KR, McGhee S, Sinkler S, et al. Large deletions and point mutations involving the dedicator of cytokinesis 8 (DOCK8) in the autosomal recessive form of hyper-IgE syndrome. J. Allergy Clin. Immunol. 2009; 124:1289-302.