

# Rabbit Anti-DOCK2 antibody

## SL12431R

Product Name:	DOCK2
Chinese Name:	细胞质分裂付出蛋白2抗体
Alias:	Dedicator of cyto kinesis 2; Dedicator of cytokinesis 2; Dedicator of cytokinesis protein 2; DOCK 2; FLJ46592; KIAA0209; DOCK2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	212kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DOCK2:451-550/1830
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The DOCK2 gene encodes dedicator of cytokinesis 2 (DOCK 2), a hematopoietic cell-specific CDM family protein that is indispensable for lymphocyte chemotaxis. DOCK 2 participates in the cytoskeletal rearrangements that are required for lymphocyte migration in response of chemokines. This peripheral membrane protein activates Rac 1 and Rac 2 small GTPases, while presumably acting as a guanine nucleotide exchange factor (GEF), which exchanges bound GDP for free GTP. DOCK 2 may also participate

in IL-2 transcriptional activation through the activation of Rac 2. DOCK 2 contains one DHR-1 (CZH-1) domain, one DHR-2 (CZH-2) domain and one SH3 domain. The DHR-2 domain is a putative GEF activity mediator. The DOCK 2 protein also colocalizes with F-Actin, and demonstrates expression in several human tissues, with the highest levels observed in peripheral blood leukocytes, thymus, spleen and liver.

### **Function:**

DOCK2 (dedicator of cytokinesis 2) is a hematopoietic cell-specific protein that participates in the cytoskeletal rearrangements required for lymphocyte migration in response to chemokines. DOCK2 activates the small GTPases RAC1 and RAC2 and may also be involved in IL2 transcriptional activation via the activation of RAC2.

#### **Subunit:**

Homodimer (Probable). Interacts with RAC1 and RAC2. Interacts with CRKL and VAV. Interacts with CD3Z.

## Subcellular Location:

Intracytoplasmic membrane. Peripheral membrane protein. Note=Colocalizes with Factin.

## Tissue Specificity:

Specifically expressed in hematopoietic cells. Highly expressed in peripheral blood leukocytes, and expressed at intermediate level in thymus and spleen. Expressed at very low level in the small intestine and colon.

## Similarity:

Belongs to the DOCK family.

Contains 1 DHR-1 domain.

Contains 1 DHR-2 domain.

Contains 1 SH3 domain.

#### SWISS:

Q92608

#### Gene ID:

1794

#### Database links:

Entrez Gene: 1794Human

Entrez Gene: 94176Mouse

Entrez Gene: 360509Rat

Omim: 603122Human

SwissProt: Q92608Human

SwissProt: Q8C3J5Mouse

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

