



Rabbit Anti-DOCK3 antibody

SL11657R

Product Name:	DOCK3
Chinese Name:	视神经细胞相关蛋白/早老素Binding protein抗体
Alias:	Dedicator of cytokinesis protein 3; DOCK 3; MOCA; Modifier of cell adhesion; Presenilin binding protein; DOCK3_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Rabbit,
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:	233kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DOCK3:1001-1100/2030
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:	PubMed
Product Detail:	MOCA (modifier of cell adhesion), also known as Presenilin-binding protein (PBP) or dedicator of cytokinesis protein 3 (DOCK3), is a 2030 amino acid cytoplasmic protein belonging to the DOCK family. MOCA interacts with Presenilin proteins and has the ability to stimulate Tau phosphorylation suggesting that MOCA may be involved in Alzheimer disease. MOCA is also thought to be a guanine nucleotide exchange factor (GEF) which activates small GTPases by exchanging bound GDP for free GTP.

Analysis of ectopic expression suggests that MOCA may affect the function of small GTPases involved in the regulation of Actin cytoskeleton or cell adhesion receptors. MOCA is localized to the neuropil, and sometimes in pyramidal cells, in normal brains, while in Alzheimer disease brains, MOCA is present in neurofibrillary tangles.

Function:

DOCK3 is a potential Guanine Nucleotide Exchange factor, present predominantly in brain. DOCK3 is localised in the neuropil and occasionally in the pyramidal cells. In brains of patients with Alzheimer's disease, it is associated with neurofibrillary tangles. DOCK3 may be required for maintaining the functional integrity of axons and loss of DOCK3 may result in axonal degeneration. It is associated with behavioural/developmental conditions like Attention Deficit Hyperactivity disorder.

Subunit:

Interacts with presenilin proteins PSEN1 and PSEN2. Interacts with CRK

Subcellular Location:

Cytoplasmic

Tissue Specificity:

In normal brains, it is localized in the neuropil, and occasionally in the pyramidal cells, while in Alzheimer disease brains, it is associated with neurofibrillary tangles.

[DOMAIN] The DHR-2 domain may mediate some GEF activity

DISEASE:

Note=A chromosomal aberration involving DOCK3 has been found in a family with early-onset behavioral/developmental disorder with features of attention deficit-hyperactivity disorder and intellectual disability. Inversion inv(3)(p14;q21). The inversion disrupts DOCK3 and SLC9A9.

Similarity:

Belongs to the DOCK family.

Contains 1 DHR-1 domain.

Contains 1 DHR-2 domain.

Contains 1 SH3 domain.

SWISS:

Q8IZD9

Gene ID:

1795

Database links:

[Entrez Gene: 1795](#)Human

[Entrez Gene: 208869](#)Mouse

[Omim: 603123](#)Human

[SwissProt: Q8IZD9](#)Human

[SwissProt: Q8CIQ7](#)Mouse

[Unigene: 476284](#)Human

[Unigene: 150259](#)Mouse

Important Note:

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

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