

DOCK3 Rabbit pAb

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Catalog # AP54584

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q8IZD9
Predicted	Rat, Pig, Dog, Human, Mouse, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	233103
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DOCK3
Epitope Specificity	1001-1100/2030
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasmic
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	MOCA (modifier of cell adhesion), also known as Presenilin-binding protein (BPB) 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.

Additional Information

Gene ID	1795
Other Names	Dedicator of cytokinesis protein 3, Modifier of cell adhesion, PS binding protein, BPB, Presenilin-binding protein, DOCK3 {ECO:0000303 PubMed:14569117, ECO:0000312 HGNC:HGNC:2989}
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-

500,ELISA=1:5000-10000

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name

DOCK3 {ECO:0000303 | PubMed:14569117, ECO:0000312 | HGNC:HGNC:2989}

Function

Potential guanine nucleotide exchange factor (GEF). GEF proteins activate some small GTPases by exchanging bound GDP for free GTP. Its interaction with presenilin proteins as well as its ability to stimulate Tau/MAPT phosphorylation suggest that it may be involved in Alzheimer disease. Ectopic expression in nerve cells decreases the secretion of amyloid-beta APBA1 protein and lowers the rate of cell- substratum adhesion, suggesting that it may affect the function of some small GTPase involved in the regulation of actin cytoskeleton or cell adhesion receptors (By similarity).

Cellular Location

Cytoplasm {ECO:0000250 | UniProtKB:Q8CIQ7}. Note=Becomes membrane associated when interacts with PSEN1 {ECO:0000250 | UniProtKB:Q8CIQ7}

Tissue Location

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

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.