For Research Use Only

DOCK3; MOCA Polyclonal antibody

Catalog Number:20683-1-AP 2 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
20683-1-AP

Size:
150ul , Concentration: 900 ug/ml by Nanodrop and 487 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_004947

GeneID (NCBI):
1795

UNIPROT ID:
Q8IZD9

Full Name:
dedicator of cytokinesis 3

Calculated MW:
233 kDa

Observed MW:
233 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:16000
IHC 1:50-1:500

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse brain tissue, human brain tissue, SH-SY5Y cells, rat brain tissue

IHC : mouse brain tissue,

Background Information

Dedicator of cytokinesis 3 (DOCK3), also named as MOCA and PBP , is a ~180 kDa protein involved in signaling trasduction. It is a potential guanine nucleotide exchange factor (GEF) which activate some small GTPases by exchanging bound GDP for free GTP. DOCK3 is associated in Alzheimer disease tangles and regulates the accumulation of amyloid precursor protein and beta-amyloid. Overexpression of Dock3 in neural cells promotes axonal outgrowth downstream of brain-derived neurotrophic factor (BDNF) signaling. DOCK3 binds to and inactivates glycogen synthase kinase-3β (GSK-3β) at the plasma membrane, thereby promoteing axon branching and microtubule assembly. By stimulating actin polymerization and microtubule assembly, DOCK3 plays important roles downstream of BDNF signaling in the CNS.

Notable Publications

Author	Pubmed ID	Journal	Application
Hua Qu	33627322	Diabetes	WB
Xingli Zhu	25687035	Int J Biochem Cell Biol	WB

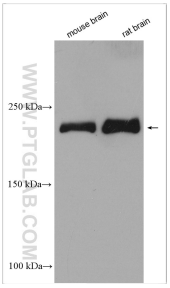
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

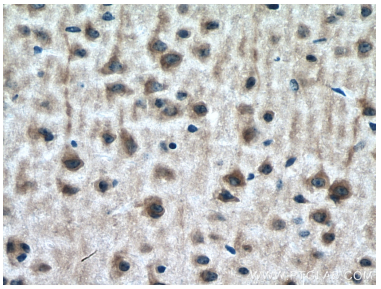
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

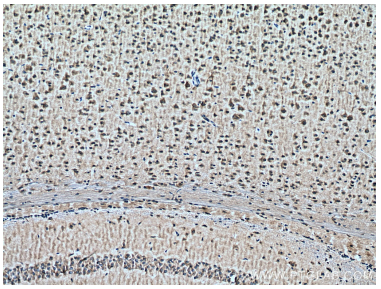
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 20683-1-AP (DOCK3; MOCA antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20683-1-AP (DOCK3; MOCA antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20683-1-AP (DOCK3; MOCA antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).