#### For Research Use Only

# DOCK3; MOCA Polyclonal antibody

Catalog Number: 20683-1-AP

2 Publications



**Basic Information** 

Catalog Number: 20683-1-AP

GenBank Accession Number: NM 004947

Antigen affinity purification

Size:

Rabbit

IgG

GeneID (NCBI):

**Purification Method:** 

150ul, Concentration: 900 µg/ml by 1795

Recommended Dilutions:

Nanodrop and 487 µg/ml by Bradford Full Name:

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

method using BSA as the standard;

dedicator of cytokinesis 3

Calculated MW: 233 kDa

Isotype:

Observed MW:

233 kDa

**Applications** 

**Tested Applications:** 

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

Positive Controls:

IHC, WB, ELISA

**Cited Applications:** 

WB

cells, rat brain tissue IHC: mouse brain tissue,

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

## **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

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

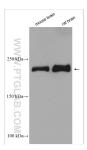
\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact: E: proteintech@ptglab.com

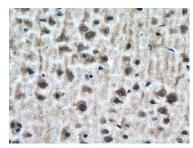
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

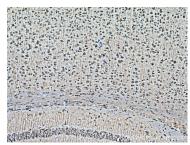
## **Selected Validation Data**



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 paraffinembedded 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 paraffinembedded 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).