### For Research Use Only

## RHOB Polyclonal antibody

Catalog Number: 14326-1-AP

**Featured Product** 

**30 Publications** 



**Basic Information** 

Catalog Number: 14326-1-AP Source:

Rabbit Isotype: IgG

Immunogen Catalog Number:

AG5593

GenBank Accession Number:

BC066954 GeneID (NCBI): 388

UNIPROT ID: P62745 Full Name:

ras homolog gene family, member B

Positive Controls:

SY5Y cells, rat brain tissue

IHC: human brain tissue,

IP: HeLa cells, mouse brain tissue

Calculated MW: 22 kDa Observed MW: 22 kDa Purification Method:

WB: mouse brain tissue, HEK-293 cells, HeLa cells, SH-

Antigen affinity purification Recommended Dilutions:

WB: 1:2000-1:12000 IP: 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC: 1:50-1:500

Applications

Tested Applications: WB, IHC, IP, ELISA Cited Applications: WB, IHC, IF, IP Species Specificity: human, mouse, rat

Cited Species: human, mouse, rat, rabbit

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

Rho-related GTP-binding protein RhoB (RHOB) is also named ARH6, ARHB and Rho cDNA clone 6 (h6). RhoB was the first member of the Rho family to be implicated in endosomal trafficking. One study showed that RhoB localizes and activates its downstream target, serine/threonine kinase (PRK1), on endosomes, and acts through this signaling pathway to disrupt the trafficking of internalized EGF receptor from endosomes to a prelysosomal compartment (PMID: 29385717). RhoB is known to be part of the immediate early genetic response to epidermal growth factor, transforming growth factor  $\beta$ , Src activation, or genotoxic stress (PMID:9545335, PMID: 10679283). RhoB was shown to have potential implications for EGF signaling by targeting the activated EGF receptors to the lysosome, which represents an "off-switch" for mitogenic signals (PMID: 1050858). RhoB was also demonstrated to exert a negative regulatory influence on TGF-  $\beta$ -induced transcriptional activation (PMID:9545335). The activity of the RhoB promoter was stimulated by genotoxic treatments indicating its role in the cellular response to DNA damage (PMID:9388198).

#### **Notable Publications**

| Author          | Pubmed ID | Journal    | Application |
|-----------------|-----------|------------|-------------|
| Mingdong Liu    | 30297842  | Nat Commun | WB,IF       |
| Jianyou Gu      | 35538494  | Mol Cancer | WB,IHC      |
| Kelly A Servage | 32382024  | Sci Rep    | WB          |

Storage

Storage

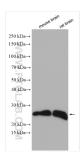
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

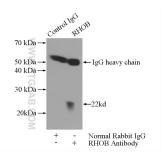
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

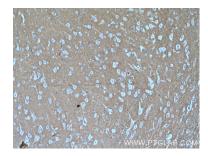
### **Selected Validation Data**



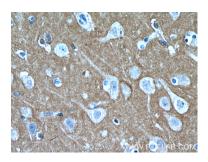
Various lysates were subjected to SDS PAGE followed by western blot with 14326-1-AP (RHOB antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



IP result of anti-RHOB (IP:14326-1-AP, 3ug; Detection:14326-1-AP 1:2000) with HeLa cells lysate 2800ug.



Immunohistochemical analysis of paraffinembedded human brain tissue slide using 14326-1-AP (RHOB antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human brain tissue slide using 14326-1-AP (RHOB antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).