

For Research Use Only

# EphA4 Polyclonal antibody

Catalog Number: 21875-1-AP

Featured Product

10 Publications



## Basic Information

<b>Catalog Number:</b> 21875-1-AP	<b>GenBank Accession Number:</b> BC026327	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 500 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2043	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:1000-1:4000 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> EPH receptor A4	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 986 aa, 110 kDa	
<b>Immunogen Catalog Number:</b> AG16233	<b>Observed MW:</b> 120 kDa	

## Applications

**Tested Applications:**  
FC, IF, IHC, IP, WB, ELISA

**Cited Applications:**  
Cell treatment, FC, IF, IHC, WB

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, rat, 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, rat brain tissue

IP : mouse brain tissue,

IHC : mouse brain tissue,

IF : Neuron cells,

## Background Information

EphA4 is a member of the Eph receptor tyrosine kinase family and has important functions in the developing and adult nervous system (PMID: 14697664). The Eph receptors comprise a large family of closely related transmembrane tyrosine kinases that actively signal when bound to their ephrin ligands. The Eph receptors are characterized by an extracellular region with a unique cysteine-rich motif extending over its amino-terminal half, followed by two fibronectin type III motifs (PMID: 9530499). They are divided into two sub-groups (EphA and EphB) based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands (PMID: 11114742). EphA4 is involved in commissure formation within the forebrain, axonal guidance in the corticospinal tract, regulation of the central pattern generator that provides normal locomotor function and axonal regeneration following spinal cord injury (PMID: 30061574). EphA4 has been implicated as a disease modifier of amyotrophic lateral sclerosis (ALS) (PMID: 22922411).

## Notable Publications

Author	Pubmed ID	Journal	Application
Laurel B Darragh	36434392	Nat Cancer	FC
De Cai	31150684	Life Sci	WB
Elizabeth A Kowalski	35737458	JCI Insight	FC

## 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

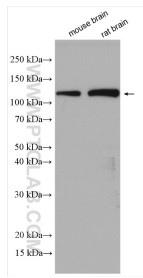
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

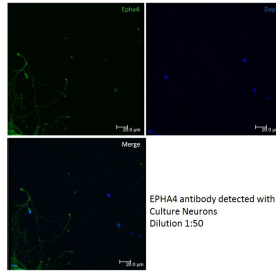
E: proteintech@ptglab.com  
W: ptglab.com

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

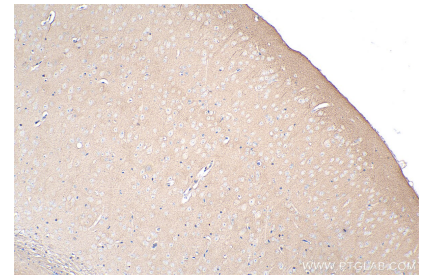
## Selected Validation Data



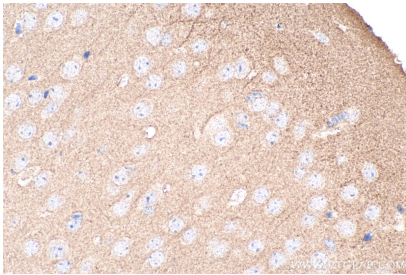
Various lysates were subjected to SDS PAGE followed by western blot with 21875-1-AP (EphA4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



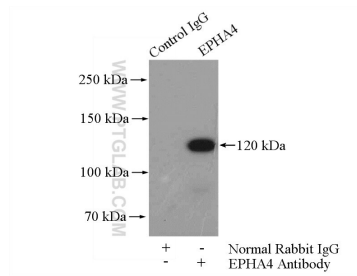
IF result of EphA4 antibody (21875-1-AP, 1:50) with culture neuron cells by Wilson Pak Kin Lou.



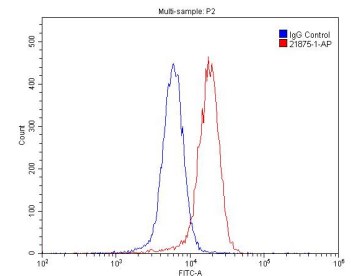
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21875-1-AP (EphA4 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21875-1-AP (EphA4 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-EphA4 (IP:21875-1-AP, 4ug; Detection:21875-1-AP 1:1000) with mouse brain tissue lysate 4000ug.



$1 \times 10^6$  SH-SY5Y cells were stained with 0.2ug EphA4 antibody (21875-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.