## For Research Use Only

## EphA4 Polyclonal antibody Catalog Number: 21875-1-AP Featured Product





Basic Information	Catalog Number: 21875-1-AP	GenBank Accession No BC026327	umber:	Purification Metho Antigen affinity pu	
	Size: 150ul, Concentration: 500 ug/ml by Nanodrop; Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG16233	GeneID (NCBI): 2043 UNIPROT ID: P54764 Full Name: EPH receptor A4 Calculated MW: 986 aa, 110 kDa Observed MW: 120 kDa		Recommended Dil WB: 1:500-1:2000 IP: 0.5-4.0 ug for 1. protein lysate IHC: 1:1000-1:4000 IF/ICC: 1:50-1:500	utions: D-3.0 mg of total
Applications	Tested Applications:		Positive Controls:		
	WB, IHC, IF/ICC, IP, ELISA		WB: mouse brain tissue, rat brain tissue		
	Cited Applications:	IP: mou		e brain tissue,	
	WB, IHC, IF, IP, Cell treatment Species Specificity:		IHC : mouse brain tissue,		
	human, mouse, rat		IF/ICC : Neuron cells,		
	Cited Species: human, mouse, rat				
	Note-IHC: suggested antigen r TE buffer pH 9.0; (*) Alternati retrieval may be performed w buffer pH 6.0	vely, antigen			
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: 1114742). 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).				
	axonal regeneration following spina	l cord injury (PMID: 300	61574). EphA4		ephrin-A and ephrin xonal guidance in or function and
Notable Publications	axonal regeneration following spina modifier of amyotrophic lateral scler	Il cord injury (PMID: 300 rosis (ALS) (PMID: 22922	61574). EphA4 2411).		ephrin-A and ephrin xonal guidance in or function and l as a disease
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Notable Publications Storage	axonal regeneration following spina   modifier of amyotrophic lateral scler   Author Pul   Laurel B Darragh 36   De Cai 31   Elizabeth A Kowalski 35   Storage: Storage Buffer:   PBS with 0.02% sodium azide and 50	I cord injury (PMID: 300 rosis (ALS) (PMID: 22922 bmed ID Journ 434392 Nat C 150684 Life S 737458 JCI In ter shipment.	61574). EphA4 2411). anl ancer ci		ephrin-A and ephrin xonal guidance in or function and as a disease Application FC WB
	axonal regeneration following spina modifier of amyotrophic lateral scler Author Pul Laurel B Darragh 36 De Cai 31: Elizabeth A Kowalski 35 Storage: Store at -20°C. Stable for one year aft Storage Buffer:	I cord injury (PMID: 300 rosis (ALS) (PMID: 22922 bmed ID Journ 434392 Nat C 150684 Life S 737458 JCI In ter shipment.	61574). EphA4 2411). anl ancer ci		ephrin-A and ephrin xonal guidance in or function and as a disease Application FC WB

## 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 paraffinembedded 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 paraffinembedded 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.