

APLP1 Recombinant monoclonal antibody

Catalog Number: 87113-1-RR

Basic Information

Catalog Number: 87113-1-RR	GenBank Accession Number: NM_005166.4	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 333	CloneNo.: 252210C4
Isotype: IgG	UNIPROT ID: P51693-1	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:250-1:1000 IF-P: 1:50-1:500
Immunogen Catalog Number: EG5634	Full Name: amyloid beta (A4) precursor-like protein 1 Calculated MW: 72 kDa Observed MW: 80 kDa	

Applications

Tested Applications: WB, IHC, IF-P, ELISA	Positive Controls:
Species Specificity: human, mouse	WB : fetal human brain tissue, mouse brain tissue
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC : mouse brain tissue, IF-P : mouse brain tissue,

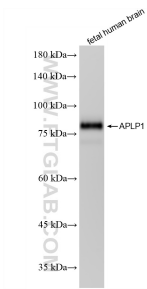
Background Information

APLP1 (Amyloid Precursor-Like Protein 1) is a member of the amyloid precursor protein (APP) family, which also includes APP and APLP2. It is a type I transmembrane glycoprotein that is highly and predominantly expressed in the central nervous system, especially at the postsynaptic density of neurons. Functionally, APLP1 plays important roles in synaptic adhesion, synaptogenesis, and neurite outgrowth. It can form homophilic trans-interactions between neighboring cells, contributing to cell-cell adhesion and the formation of synaptic structures. Its proteolytic processing by α -, β -, and γ -secretases releases intracellular fragments that may participate in transcriptional regulation and signal transduction, potentially influencing gene expression and neuronal survival.

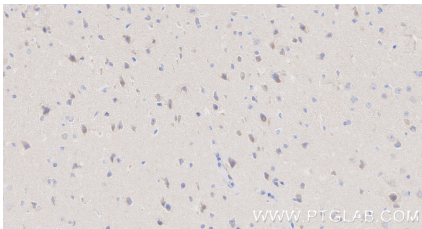
Storage

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

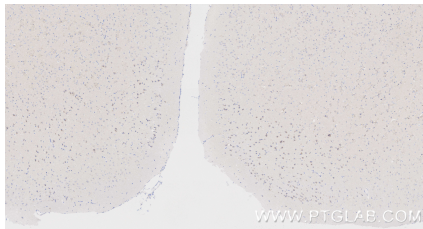
Selected Validation Data



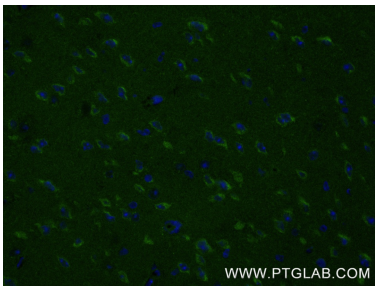
fetal human brain tissue were subjected to SDS PAGE followed by western blot with 87113-1-RR (APLP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



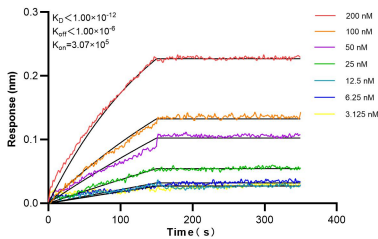
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 87113-1-RR (APLP1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 87113-1-RR (APLP1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using APLP1 antibody (87113-1-RR, Clone: 252210C4) at dilution of 1:200 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 87113-1-RR against Human APLP1 were performed. The affinity constant is below 1 pM.