

AP2S1 Recombinant antibody

Catalog Number: 84174-3-RR

Basic Information

Catalog Number: 84174-3-RR	GenBank Accession Number: BC006337	Purification Method: Protein A purification
Size: 1000 ug/ml	GeneID (NCBI): 1175	CloneNo.: 241369F1
Source: Rabbit	UNIPROT ID: P53680	Recommended Dilutions: WB 1:1000-1:8000 IHC 1:400-1:1600 IF/ICC 1:125-1:500
Isotype: IgG	Full Name: adaptor-related protein complex 2, sigma 1 subunit	
Immunogen Catalog Number: AG8095	Calculated MW: 142 aa, 17 kDa Observed MW: 15-17 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Species Specificity:
human, mouse, rat

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: SH-SY5Y cells, mouse brain tissue, mouse kidney tissue, rat brain tissue

IHC: mouse testis tissue,

IF/ICC: HeLa cells,

Background Information

AP2S1 is a component of the adaptor protein complex 2 (AP-2). AP complexes are cytosolic heterotetramers that mediate the sorting of membrane proteins in the secretory and endocytic pathways. AP complexes form clathrin-coated vesicles (CCVs) by recruiting the scaffold protein, clathrin. AP complexes also play a pivotal role in cargo selection by recognizing the sorting signals within the cytoplasmic tail of integral membrane proteins. AP-2 is composed of two large adaptins (alpha-type subunit AP2A1 or AP2A2 and beta-type subunit AP2B1), a medium adaptin (mu-type subunit AP2M1), and a small adaptin (sigma-type subunit AP2S1). It works on the plasma membrane to internalize cargo in clathrin-mediated endocytosis. Missense mutations of AP2S1 affect Arg15 and lead to familial hypocalciuric hypercalcemia type 3 (FHH3), an extracellular calcium homeostasis disorder affecting the parathyroids, kidneys, and bone (PMID: 23222959).

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

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

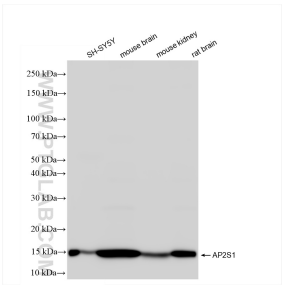
T: 4006900926

E: Proteintech-CN@ptglab.com

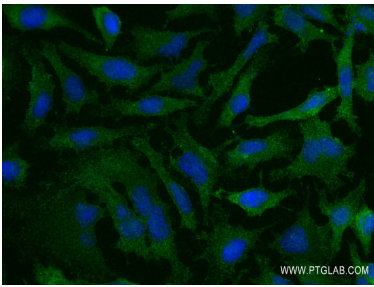
W: ptgcn.com

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

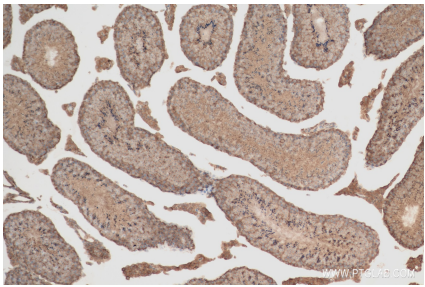
Selected Validation Data



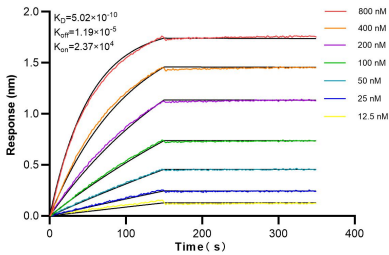
Various lysates were subjected to SDS PAGE followed by western blot with 84174-3-RR (AP2S1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using AP2S1 antibody (84174-3-RR, Clone: 241369F1) at dilution of 1:250 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 84174-3-RR (AP2S1 antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84174-3-RR against Human AP2S1 were performed. The affinity constant is 0.502 nM.