

For Research Use Only

# AP2S1 Recombinant antibody

Catalog Number: 84174-3-RR



## Basic Information

<b>Catalog Number:</b> 84174-3-RR	<b>GenBank Accession Number:</b> BC006337	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1175	<b>CloneNo.:</b> 241369F1
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P53680	<b>Recommended Dilutions:</b> WB 1:1000-1:8000 IHC 1:400-1:1600 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> adaptor-related protein complex 2, sigma 1 subunit	
<b>Immunogen Catalog Number:</b> AG8095	<b>Calculated MW:</b> 142 aa, 17 kDa	
	<b>Observed MW:</b> 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

\*\*\* 20ul sizes contain 0.1% BSA

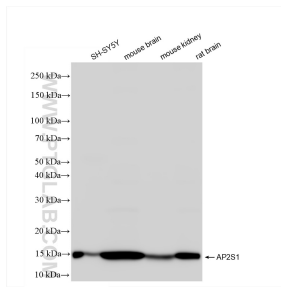
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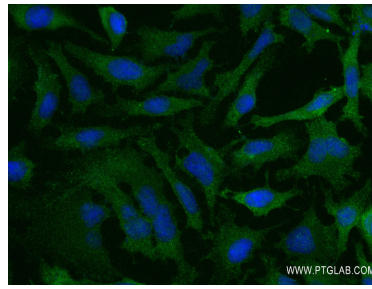
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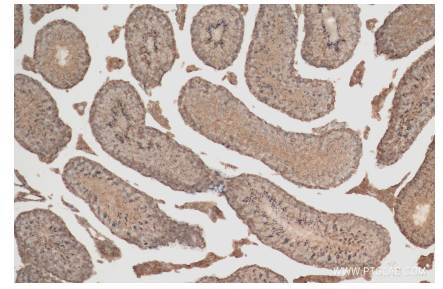
## Selected Validation Data



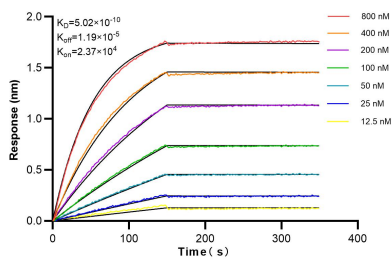
Various lysates were subjected to SDS PAGE followed by western blot with 84174-3-RR (AP2S1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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.