

For Research Use Only

ATP1A3 (middle) Polyclonal antibody

Catalog Number: 28030-1-AP

2 Publications



Basic Information

Catalog Number: 28030-1-AP	GenBank Accession Number: BC015566	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 300 ug/ml by Nanodrop and 267 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 478	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:50-1:500 IF/ICC 1:50-1:500
Source: Rabbit	UNIPROT ID: P13637	
Isotype: IgG	Full Name: ATPase, Na ⁺ /K ⁺ transporting, alpha 3 polypeptide	
Immunogen Catalog Number: AG27705	Calculated MW: 113 kDa	
	Observed MW: 113 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Cited Applications: WB, IF	WB : HeLa cells, SH-SY5Y cells, SKOV-3 cells, U-87 MG cells
Species Specificity: Human	IHC : human prostate cancer tissue,
Cited Species: human	IF/ICC : HeLa cells,
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

ATP1A3 participates in the catalytic hydrolysis of ATP and the exchanging of sodium and potassium ions across plasma membrane. The catalytic activity mode is $ATP + H_2O + Na^+(In) + K^+(Out) = ADP + phosphate + Na^+(Out) + K^+(In)$. It has been published that the neurologic disorders rapid-onset dystonia-parkinsonism (RDP), alternating hemiplegia of childhood (ACH) and CAPOS syndrome (cerebellar ataxia, areflexia, pes cavus, optic atrophy and sensorineural hearing loss) are all related with the mutation of ATP1A3. There are other reports suggest that early life epilepsy and episodic apnea revealing are potentially associated with the mutation of ATP1A3 as a result of impairment of Na/K homeostasis. This antibody is generated against the middle region (378-580aa) of ATP1A3 and detects 113 kDa protein in SDS-PAGE.(PMID: 30097153, 20301294, 29922587)

Notable Publications

Author	Pubmed ID	Journal	Application
Yi-Ing Chen	35618735	Nat Commun	WB
Satoko Miyatake	33762331	Sci Adv	WB, IF

Storage

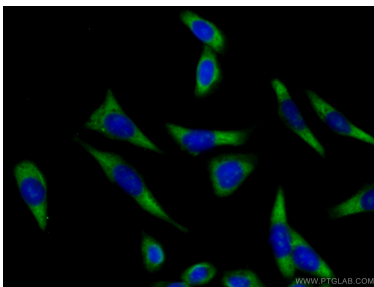
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

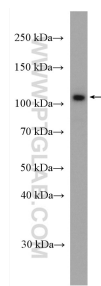
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

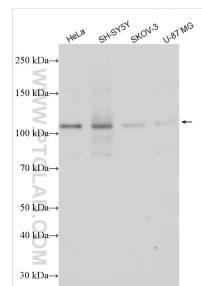
Selected Validation Data



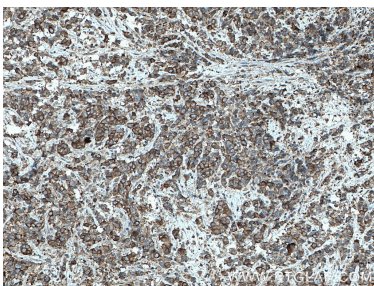
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 28030-1-AP (ATP1A3 (middle) antibody) at dilution of 1:50 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



HeLa cells were subjected to SDS PAGE followed by western blot with 28030-1-AP (ATP1A3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 28030-1-AP (ATP1A3 (middle) antibody) at dilution of 1:14000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 28030-1-AP (ATP1A3 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).