

For Research Use Only

AMPK Beta 1 Recombinant monoclonal antibody

Catalog Number: 88497-1-RR



Basic Information

Catalog Number: 88497-1-RR	GenBank Accession Number: BC001007	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 5564	CloneNo.: 260706B12
Source: Rabbit	UNIPROT ID: Q9Y478	Recommended Dilutions: WB: 1:5000-1:50000 IF/ICC: 1:200-1:800
Isotype: IgG	Full Name: protein kinase, AMP-activated, beta 1 non-catalytic subunit	
Immunogen Catalog Number: AG0301	Calculated MW: 38 kDa	
	Observed MW: 38 kDa	

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, mouse, rat	WB : HeLa cells, HEK-293 cells, A431 cells, K-562 cells, NIH/3T3 cells, PC-12 cells, NR8383 cells IF/ICC : MCF-7 cells,

Background Information

AMPK Beta 1 (5'-AMP-activated protein kinase subunit beta-1) is also named as PRKAB1 and AMPK. AMPK, a serine/threonine kinase that exists as a heterotrimer comprised of a catalytic α -subunit and regulatory β - and γ -subunits, has been recognized as a sensor of cellular energy homeostasis (PMID: 21937710). AMPK regulates key metabolic enzymes, cell growth, apoptosis, gene transcription, and protein synthesis (PMID: 12829246). AMPK is an energy sensor and plays an essential role in the control of cellular bioenergetics by responding to various stresses including those that induce changes in the cellular AMP:ATP ratio or modulation in intracellular calcium (PMID: 27812976, PMID: 26616193). Recent studies have shown that AMPK mediates the inhibition of cell proliferation and growth of tumor cells (PMID: 16613876). AMPK also inhibits the expression of Glut1 and glycolysis in Tregs by inhibiting mTORC1 signaling (PMID: 25477880).

Storage

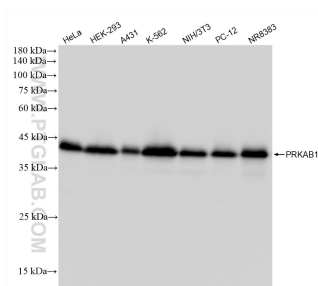
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

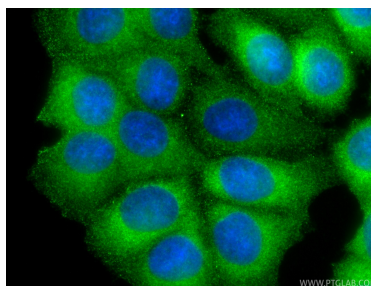
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 88497-1-RR (PRKAB1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using AMPK Beta 1 antibody (88497-1-RR, Clone: 260706B12) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).