For Research Use Only

CoraLite® Plus 488-conjugated AMPK Beta 1 Recombinant monoclonal antibody

Catalog Number:CL488-88497

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
CL488-88497

Size:
100ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0301

GenBank Accession Number:
BC001007

GeneID (NCBI):
5564

UNIPROT ID:
Q9Y478

Full Name:
protein kinase, AMP-activated, beta 1 non-catalytic subunit

Calculated MW:
38 kDa

Observed MW:
38 kDa

Purification Method:
Protein A purification

CloneNo.:
260706B12

Recommended Dilutions:
IF/ICC: 1:50-1:500

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
IF/ICC

Species Specificity:
human, mouse, rat

Positive Controls:

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. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

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 Methanol) fixed MCF-7 cells using CoraLite® Plus 488 AMPK Beta 1 antibody (CL488-88497, Clone: 260706B12) at dilution of 1:200.