For Research Use Only

MMACHC Monoclonal antibody

Catalog Number:66609-1-Ig 2 Publications

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

Basic Information

Catalog Number:
66609-1-Ig

Size:
150ul , Concentration: 900 ug/ml by Nanodrop and 907 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG15001

GenBank Accession Number:
BC006122

GeneID (NCBI):
25974

UNIPROT ID:
Q9Y4U1

Full Name:
methylmalonic aciduria (cobalamin deficiency) cblC type, with homocystinuria

Calculated MW:
282 aa, 32 kDa

Purification Method:
Protein A purification

CloneNo.:
4G10A11

Recommended Dilutions:
WB 1:5000-1:50000
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), ELISA

Cited Applications:
WB

Species Specificity:
human, mouse

Cited Species:
human, rat

Positive Controls:

WB : HepG2 cells, K-562 cells, HEK-293 cells, HeLa cells, Raji cells, RAW 264.7 cells

IF/ICC : HepG2 cells,

Background Information

MMACHC, also named as CblC, is located on chromosome 1 and comprises four coding exons. Human MMACHC catalyzes the reductive decyanation of cyanocobalamin and may serve as a trafficking chaperone for intracellular cobalamin. It also catalyzes the glutathione-dependent reductive demethylation of methylcobalamin, and, with much lower efficiency, the glutathione-dependent reductive demethylation of adenosylcobalamin. NMACHC binds cyanocobalamin, adenosylcobalamin, methylcobalamin and other, related vitamin B12 derivatives.

Notable Publications

Author	Pubmed ID	Journal	Application
Lingzhi Wang	35131382	Cancer Lett	WB
Wenjie Hu	37843800	Mol Neurobiol	WB

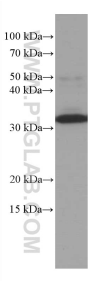
Storage

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

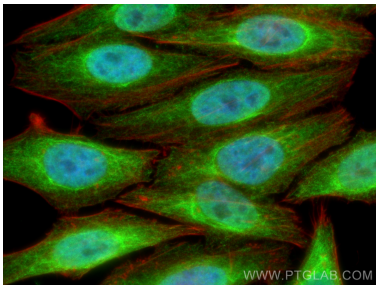
*** 20ul sizes contain 0.1% BSA

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

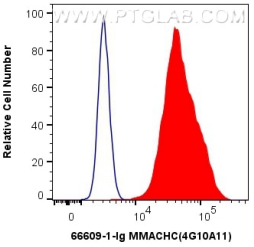
Selected Validation Data



HepG2 cells were subjected to SDS PAGE followed by western blot with 66609-1-Ig (MMACHC antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MMACHC antibody (66609-1-Ig, Clone: 4G10A11) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



1X10^6 HeLa cells were intracellularly stained with 0.8 ug Anti-Human MMACHC (66609-1-Ig, Clone:4G10A11) and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.8 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).