

For Research Use Only

MTHFD2 Recombinant monoclonal antibody, PBS Only

Catalog Number: 86608-3-PBS



Basic Information

Catalog Number:

86608-3-PBS

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2911

GenBank Accession Number:

BC017054

GeneID (NCBI):

10797

UNIPROT ID:

P13995

Full Name:

methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, methenyltetrahydrofolate cyclohydrolase

Calculated MW:

350 aa, 38 kDa

Observed MW:

33-38 kDa

Purification Method:

Protein A purification

CloneNo.:

251431F2

Applications

Tested Applications:

WB, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:

human, mouse, rat

Background Information

Methylenetetrahydrofolate dehydrogenase 2 (MTHFD2) is a folate-coupled mitochondrial metabolic enzyme characterized by methylenetetrahydrofolate dehydrogenase and cyclohydrolase activity. It was demonstrated that suppression of MTHFD2 inhibits methylation reactions, decreases protein synthesis and disrupts redox homeostasis, which may ultimately result in significant changes in cellular metabolic phenotype. MTHFD2 is reported to be up-regulated in various tumours, such as lung adenocarcinoma (PMID: 34121323) and breast cancer (PMID: 34007312).

Storage

Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS only, pH7.3

For technical support and original validation data for this product please contact:

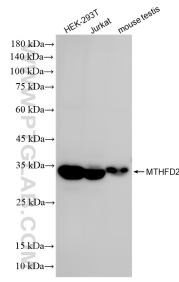
T: 4006900926

E: Proteintech-CN@ptglab.com

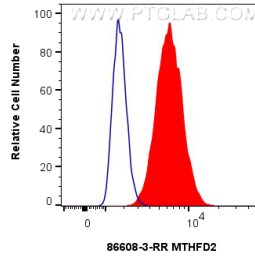
W: ptgcn.com

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

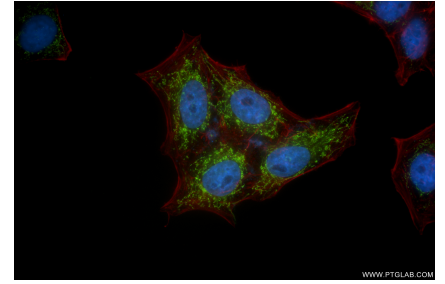
Selected Validation Data



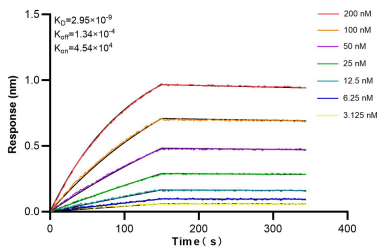
Various lysates were subjected to SDS PAGE followed by western blot with 86608-3-RR (MTHFD2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86608-3-PBS in a different storage buffer formulation.



1×10^6 A549 cells were intracellularly stained with 0.25 ug MTHFD2 Recombinant monoclonal antibody (86608-3-RR, Clone:251431F2) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019). This data was developed using the same antibody clone with 86608-3-PBS in a different storage



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MTHFD2 antibody (86608-3-RR, Clone: 251431F2) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 86608-3-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 86608-3-RR against Human MTHFD2 were performed. The affinity constant is 2.95 nM.