

For Research Use Only

CoraLite®594-conjugated MTHFR Monoclonal antibody



Catalog Number:CL594-66612

Basic Information

Catalog Number:

CL594-66612

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG14970

GenBank Accession Number:

BC053509

GeneID (NCBI):

4524

UNIPROT ID:

P42898

Full Name:

5,10-methylenetetrahydrofolate reductase (NADPH)

Calculated MW:

656 aa, 75 kDa

Observed MW:

70 kDa

Purification Method:

Protein A purification

CloneNo.:

1F7A3

Recommended Dilutions:

IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:

588 nm / 604 nm

Applications

Tested Applications:

IF/ICC

Species Specificity:

human

Positive Controls:

IF/ICC : HeLa cells,

Background Information

5,10-Methylenetetrahydrofolate reductase (MTHFR) is a crucial enzyme in the folate metabolic pathway with a key role in generating methyl groups. MTHFR reduces 5,10-methylenetetrahydrofolate (5,10-methyleneTHF) to 5-methylTHF, the primary carbon donor for methionine production from homocysteine. In humans and mice studies, mutations and polymorphisms in MTHFR are associated with impaired spermatogenesis and male infertility. It has been reported that MTHFR is highly phosphorylated under unperturbed conditions and T34 is the priming phosphorylation site. MTHFR gene has two promoters and isoform (70 kDa and 77 kDa). Although the major form of MTHFR is 77kDa in most tissues, a second isoform of 70kDa was observed after western blotting of human fetal liver and porcine liver. (PMID: 24769206, PMID: 34128976, PMID: 18615588)

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, pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

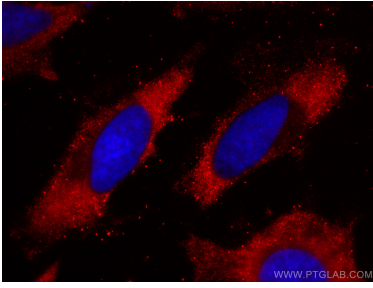
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using CoraLite®594 MTHFR antibody (CL594-66612, Clone: 1F7A3) at dilution of 1:200.