For Research Use Only

## CoraLite®594-conjugated MTHFR Monoclonal antibody

Catalog Number: CL594-66612



**Purification Method:** 

Protein A purification

IF/ICC 1:50-1:500

588 nm / 604 nm

wavelengths:

Excitation/Emission maxima

CloneNo.:

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL594-66612 BC053509 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 4524 1F7A3 Nanodrop: **UNIPROT ID:** Recommended Dilutions:

P42898 Mouse Full Name:

Isotype: 5,10-methylenetetrahydrofolate reductase (NADPH) lgG2b

Immunogen Catalog Number: Calculated MW: AG14970 656 aa. 75 kDa

> Observed MW: 70 kDa

**Applications** 

**Tested Applications:** 

Species Specificity:

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  $role\ in\ generating\ methyl\ groups.\ MTHFR\ reduces\ 5, 10-methylenete trahydrofolate\ (5, 10-methylene THF)\ to\ 5-methylenete trahydrofolate\ (5, 10-methylene)\ to\ 5-methylenete\ trahydrofolate\ (5, 10-methylenete\ trahydrofolate\ (5, 10-methylenete\ trahydrofolate\ tr$ 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:

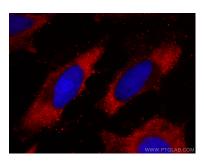
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

in USA), or 1(312) 455-8498 (outside USA)

## 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.