

MTHFD1 Recombinant antibody

Catalog Number: 84884-5-RR

Basic Information

Catalog Number:

84884-5-RR

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1225

GenBank Accession Number:

BC009806

GeneID (NCBI):

4522

UNIPROT ID:

P11586

Full Name:

methylenetetrahydrofolate
dehydrogenase (NADP+ dependent) 1,
methenyltetrahydrofolate
cyclohydrolase,
formyltetrahydrofolate synthetase

Calculated MW:

101 kDa

Observed MW:

101-110 kDa

Purification Method:

Protein A purification

CloneNo.:

242388F1

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:200-1:800

IF/ICC: 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Species Specificity:

human

**Note-IHC: suggested antigen retrieval with
TE buffer pH 9.0; (*) Alternatively, antigen
retrieval may be performed with citrate
buffer pH 6.0**

Positive Controls:

WB : K-562 cells, HuH-7 cells, HEK-293 cells, A549 cells,
MCF-7 cells

IHC : human liver cancer tissue, human colon cancer
tissue

IF/ICC : HEK-293 cells,

Background Information

MTHFD1 is a trifunctional enzyme involved in the pathway tetrahydrofolate interconversion, which is part of One-carbon metabolism. MTHFD1 is associated with HCC and CRC progression. It has been reported that MTHFD-deficient patient fibroblasts exhibit enriched MTHFD1 in the nucleus which is critical for de novo dTMP synthesis. (PMID: 31133746, 30997850, 31421459, 25548164)

Storage

Storage:

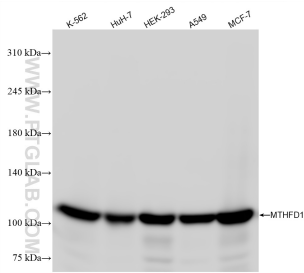
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

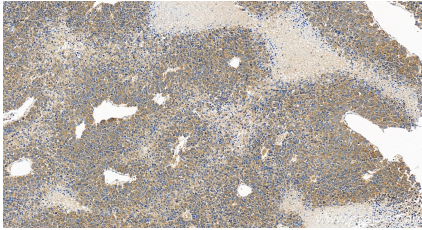
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

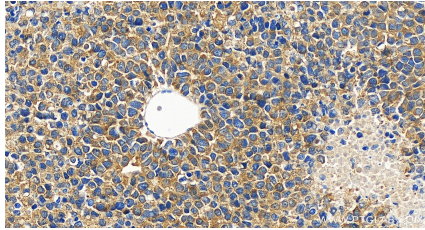
Selected Validation Data



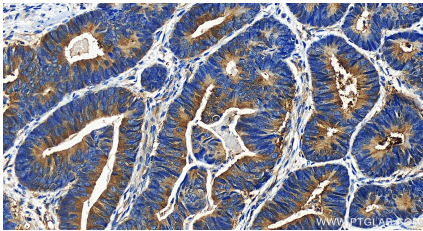
Various lysates were subjected to SDS PAGE followed by western blot with 84884-5-RR (MTHFD1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 84884-5-RR (MTHFD1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



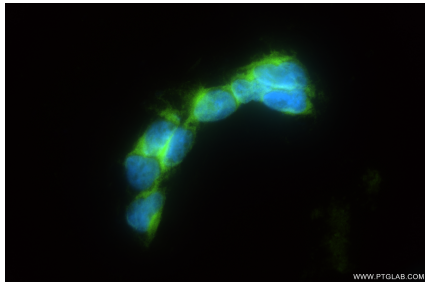
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 84884-5-RR (MTHFD1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



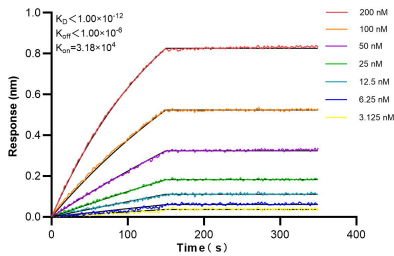
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84884-5-RR (MTHFD1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84884-5-RR (MTHFD1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using MTHFD1 antibody (84884-5-RR, Clone: 242388F1) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 84884-5-RR against Human MTHFD1 were performed. The affinity constant is below 1 pM.