

MTHFD1 Antibody (Center P550)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2788f

Specification

MTHFD1 Antibody (Center P550) - Product Information

Application IF, WB, IHC-P,E

Primary Accession P11586

Other Accession P27653, Q922D8,

NP_005947

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit Ig
101531
535-562

MTHFD1 Antibody (Center P550) - Additional Information

Gene ID 4522

Other Names

C-1-tetrahydrofolate synthase, cytoplasmic, C1-THF synthase,

Methylenetetrahydrofolate dehydrogenase, Methenyltetrahydrofolate cyclohydrolase, Formyltetrahydrofolate synthetase, C-1-tetrahydrofolate synthase, cytoplasmic

C-1-tetrahydrofolate synthase, cytoplasmic, N-terminally processed, MTHFD1, MTHFC, MTHFD

Target/Specificity

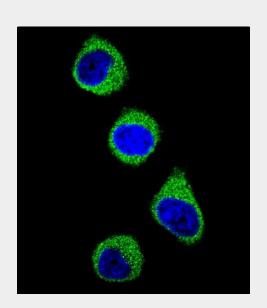
This MTHFD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 535-562 amino acids from the Central region of human MTHFD1.

Dilution

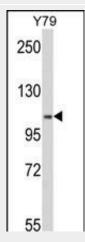
IF~~1:10~50 WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation



Confocal immunofluorescent analysis of MTHFD1 Antibody (Center P550) (Cat#AP2788f) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Western blot analysis of MTHFD1 Antibody (Center P550) (Cat. #AP2788f) in Y79 cell line lysates (35ug/lane). MTHFD1 (arrow) was detected using the purified Pab.



followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MTHFD1 Antibody (Center P550) is for research use only and not for use in diagnostic or therapeutic procedures.

MTHFD1 Antibody (Center P550) - Protein Information

Name MTHFD1

Synonyms MTHFC, MTHFD

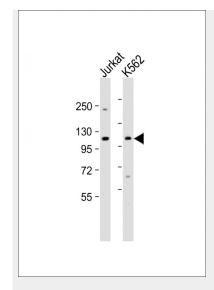
Cellular Location Cytoplasm.

Tissue Location Ubiquitous.

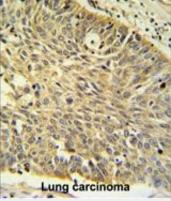
MTHFD1 Antibody (Center P550) -**Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



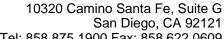
All lanes: Anti-MTHFD1 Antibody (Center P550) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 102 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MTHFD1 Antibody (Center P550) (Cat. #AP2788f) IHC analysis in formalin fixed and paraffin embedded human Lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the MTHFD1 Antibody (Center P550) for immunohistochemistry. Clinical relevance has not been evaluated.

MTHFD1 Antibody (Center P550) -**Background**

MTHFD1 is a protein that possesses three distinct enzymatic activities, 5,10-methylenetetrahydrofolate





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dehydrogenase, 5,10-methenyltetrahydrofolate cyclohydrolase and 10-formyltetrahydrofolate synthetase. Each of these activities catalyzes one of three sequential reactions in the interconversion of 1-carbon derivatives of tetrahydrofolate, which are substrates for methionine, thymidylate, and de novo purine syntheses. The trifunctional enzymatic activities are conferred by two major domains, an aminoterminal portion containing the dehydrogenase and cyclohydrolase activities and a larger synthetase domain.

MTHFD1 Antibody (Center P550) -**References**

Ivanov, A., J Am Diet Assoc 109 (2), 313-318 (2009)

Schmidt A., Biochemistry 39:6325-6335(2000) Hol F.A., Clin. Genet. 53:119-125(1998)

MTHFD1 Antibody (Center P550) - Citations

• Divergent effects of glutathione depletion on isocitrate dehydrogenase 1 and the pentose phosphate pathway in hamster liver