


Product datasheet

Anti-MTHFD1 antibody ab226341

[1 References](#) [2 Images](#)

Overview

Product name	Anti-MTHFD1 antibody
Description	Rabbit polyclonal to MTHFD1
Host species	Rabbit
Tested applications	Suitable for: IP, WB
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Sheep, Rabbit, Horse, Cow, Cat, Dog, Chimpanzee, Cynomolgus monkey, Rhesus monkey, Gorilla, Orangutan, Giant Panda 
Immunogen	Synthetic peptide within Human MTHFD1 aa 150-200. The exact sequence is proprietary. Database link: P11586
Positive control	WB: HeLa, HEK-293T, Jurkat, TCMK-1 and NIH/3T3 whole cell lysates. IP: HEK-293T whole cell lysate.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituent: Tris citrate/phosphate pH 7 to 8
Purity	Immunogen affinity purified
Purification notes	ab226341 was affinity purified using an epitope specific to MTHFD1 immobilized on solid

	support.
Clonality	Polyclonal
Isotype	IgG

Applications

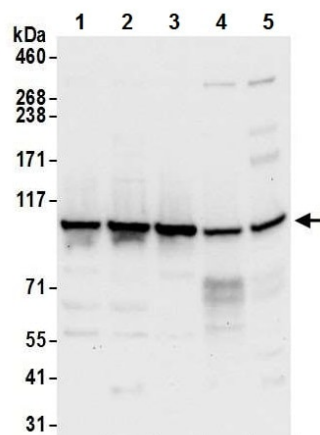
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab226341 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at 2-10 µg/mg of lysate.
WB		1/2000 - 1/10000. Predicted molecular weight: 102 kDa.

Target

Tissue specificity	Ubiquitous.
Pathway	One-carbon metabolism; tetrahydrofolate interconversion.
Involvement in disease	Defects in MTHFD1 may be a cause of susceptibility to folate-sensitive neural tube defects (folate-sensitive NTD) [MIM:601634]. The most common NTDs are open spina bifida (myelomeningocele) and anencephaly. Genetic defects in MTHFD1 may affect the risk of spina bifida via the maternal rather than the embryonic genotype. Genetic variation in MTHFD1 could be associated with susceptibility to colorectal cancer (CRC) [MIM:114500].
Sequence similarities	In the N-terminal section; belongs to the tetrahydrofolate dehydrogenase/cyclohydrolase family. In the C-terminal section; belongs to the formate--tetrahydrofolate ligase family.
Domain	This trifunctional enzyme consists of two major domains: an N-terminal part containing the methylene-THF dehydrogenase and cyclohydrolase activities and a larger C-terminal part containing formyl-THF synthetase activity.
Cellular localization	Cytoplasm.

Images



Western blot - Anti-MTHFD1 antibody (ab226341)

All lanes : Anti-MTHFD1 antibody (ab226341) at 0.1 µg/ml

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lane 3 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 4 : TCMK-1 (mouse kidney epithelial cell line) whole cell lysate

Lane 5 : NIH/3T3 (mouse embryonic fibroblast cell line) whole cell lysate

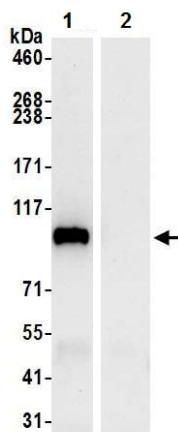
Lysates/proteins at 50 µg per lane.

Developed using the ECL technique.

Predicted band size: 102 kDa

Exposure time: 10 seconds

Cell lysates were prepared using NETN lysis buffer.



Immunoprecipitation - Anti-MTHFD1 antibody
(ab226341)

MTHFD1 was immunoprecipitated from HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate (prepared using NETN lysis buffer; 20% of IP loaded) with ab226341 at 6 µg per reaction. Western blot was performed from the immunoprecipitate using ab226341 at 1 µg/ml.

Lane 1: ab226341 IP in HEK-293T whole cell lysate.

Lane 2: Control IgG IP in HEK-293T whole cell lysate.

Detection: Chemiluminescence with exposure time of 10 seconds.

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