

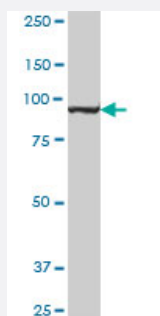
MaxPab®

# MTHFD1 purified MaxPab mouse polyclonal antibody (B01P)

Catalog # H00004522-B01P

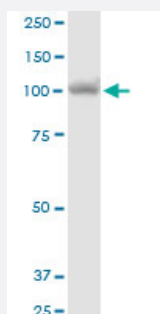
Size 50 ug

## Applications



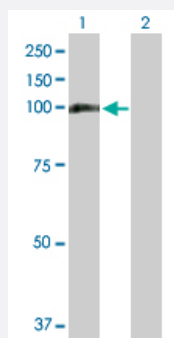
### Western Blot (Tissue lysate)

MTHFD1 MaxPab polyclonal antibody. Western Blot analysis of MTHFD1 expression in human placenta.



### Western Blot (Cell lysate)

MTHFD1 MaxPab polyclonal antibody. Western Blot analysis of MTHFD1 expression in HeLa.

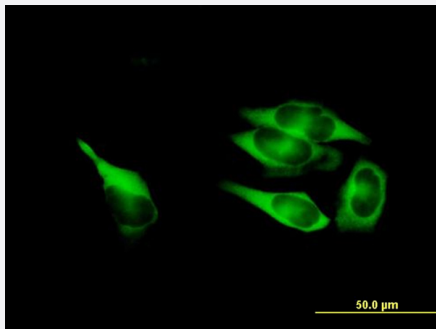


### Western Blot (Transfected lysate)

Western Blot analysis of MTHFD1 expression in transfected 293T cell line ([H00004522-T01](#)) by MTHFD1 MaxPab polyclonal antibody.

Lane1:MTHFD1 transfected lysate(102.85 KDa).

Lane2:Non-transfected lysate.



## Immunofluorescence

Immunofluorescence of purified MaxPab antibody to MTHFD1 on HeLa cell.  
[antibody concentration 10 ug/ml]

## Specification

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Description     | Mouse polyclonal antibody raised against a full-length human MTHFD1 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Immunogen               | MTHFD1 (AAH50420.1, 1 a.a. ~ 935 a.a) full-length human protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Sequence                | <p>MAPAEILNGKEISAIQIRARLKNQVTQLKEQVPGFTPRLAILQVGNRDDSNLYINVKLKAAEEIGIKAT<br/> HIKLPRTTTESEVMKYITSLNEDSTVHGFLVQLPLDSENSINTEEVINAIAPKDVGLTSINAGRLAR<br/> GDLNDCFIPCTPKGCLELIKETGVPIAGRHAVVVGGRSKIVGAPMHDLLLWNNATVTTCHSKTAHL<br/> EEVNGKDILVVATGQPEMVKGWIKPGAMIDCGINYPDDKKPNGRKKVVGDVAYDEAKERASFIT<br/> PVPGGVGPMTVAMLMQSTVESAKRFLEKFKPGKWMQYNNLNLKTPVPSDIDISRCKPKPIGKL<br/> AREIGLLSEEVELYGETKAKVLLSALERLKHPRDGKYVVVTGITPTPLGEGKSTTTIGLVQALGAHLY<br/> QNVFACVRQPSQGPFTGKGGGAAGGGYSQVIPMEEFNLHLTGDIHAITAANNLVAAIDARIFHELT<br/> QTDKALFNRLVPSVNGVRRFSDIQIRRLKRLGIEKTDPTTLDEEINRFARLDIDPETITWQRVLDTN<br/> DRFLRKITIGQAPTEKGHTRTAQFDISVASEIMAVLALTTSLDMRERLGMVVASSKKGEPVSAE<br/> DLGVSGALTVLMKDAIKPNLMQTLEGTPVFVHAGPFANIAHGNSIADRIALKLVGPEGFVVTEAG<br/> FGADIGMEKFFNIKCRYSGLCPHVVVLVATVRALKMHGGGPTVTAGLPLPKAYIQENLELVEKGFS<br/> NLKKQIENARMFGIPVVAVNAFKTDTESELDIFISRLSREHGAFDAVKCTHWAEGGKGALALAAQA<br/> VQRAAQAPSSFQLLYDLKLPVEDKIRIAQKYGADDIELLPEAQHKADEVYTKQGFGNLPICMAKTHL<br/> SLSHNPEQKGVPTGFILPIRDIRASVGAGFLYPLVGTMTMPGLPTRPCFYDIDLDPETEQQVNGLF</p> |
| Host                    | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Reactivity              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Quality Control Testing | Antibody reactive against mammalian transfected lysate.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Storage Buffer          | In 1x PBS, pH 7.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Storage Instruction     | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Applications

- Western Blot (Tissue lysate)

MTHFD1 MaxPab polyclonal antibody. Western Blot analysis of MTHFD1 expression in human placenta.

[Protocol Download](#)

- Western Blot (Cell lysate)

MTHFD1 MaxPab polyclonal antibody. Western Blot analysis of MTHFD1 expression in HeLa.

[Protocol Download](#)

- Western Blot (Transfected lysate)

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Lane1:MTHFD1 transfected lysate(102.85 KDa).

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[Protocol Download](#)

- Immunofluorescence

Immunofluorescence of purified MaxPab antibody to MTHFD1 on HeLa cell. [antibody concentration 10 ug/ml]

## Gene Info — MTHFD1

Entrez GeneID [4522](#)

GeneBank Accession# [BC050420.1](#)

Protein Accession# [AAH50420.1](#)

Gene Name MTHFD1

Gene Alias MTHFC, MTHFD

Gene Description methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cycle hydrolase, formyltetrahydrofolate synthetase

Omim ID [172460 601634](#)

Gene Ontology [Hyperlink](#)

**Gene Summary**

This gene encodes a protein that possesses three distinct enzymatic activities, 5,10-methylenetetrahydrofolate dehydrogenase, 5,10-methylenetetrahydrofolate 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. [provided by RefSeq]

**Other Designations**

5,10-methylenetetrahydrofolate dehydrogenase, 5,10-methylenetetrahydrofolate cyclohydrolase, 10-formyltetrahydrofolate synthetase|C1-THF synthase|NADP-dependent cyclohydrolase/formyltetrahydrofolate synthetase|cytoplasmic C-1-tetrahydrofolate synthase|met

## Pathway

- [Glyoxylate and dicarboxylate metabolism](#)
- [Metabolic pathways](#)
- [One carbon pool by folate](#)

## Disease

- [Abortion](#)
- [Abruptio Placentae](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Aortic Aneurysm](#)
- [Arthritis](#)
- [Atherosclerosis](#)
- [Bipolar Disorder](#)
- [Birth Weight](#)
- [Brain Ischemia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)

- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [DNA Damage](#)
- [Ductus Arteriosus](#)
- [Edema](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Exfoliation Syndrome](#)
- [Fetal Diseases](#)
- [Fetal Growth Retardation](#)
- [Folic Acid Deficiency](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)
- [Heart Defects](#)
- [Hernia](#)
- [Hyperhomocysteinemia](#)
- [Infant](#)
- [Infection](#)

- [Inflammation](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Metabolic Diseases](#)
- [Microsatellite Instability](#)
- [Migraine Disorders](#)
- [Migraine with Aura](#)
- [Musculoskeletal Diseases](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neural Tube Defects](#)
- [Ovarian Neoplasms](#)
- [Parkinson disease](#)
- [Placental Insufficiency](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Schizophrenia](#)
- [Skin Diseases](#)
- [Spinal Dysraphism](#)
- [Stomach Neoplasms](#)
- [Stroke](#)

- [Vertebral Artery Dissection](#)