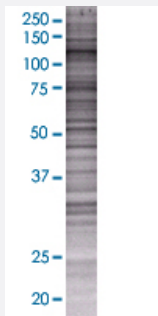


# MTHFD1 293T Cell Transient Overexpression Lysate(Denatured)

Catalog # H00004522-T01

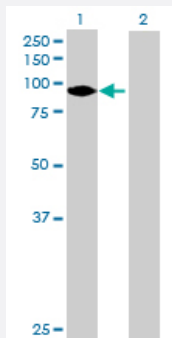
Size 100 uL

## Applications



### SDS-PAGE Gel

MTHFD1 transfected lysate.



### Western Blot

Lane 1: MTHFD1 transfected lysate ( 102.96 KDa)

Lane 2: Non-transfected lysate.

## Specification

**Transfected Cell Line** 293T

**Plasmid** pCMV-MTHFD1 full-length

**Host** Human

**Theoretical MW (kDa)** 102.96

**Quality Control Testing** Transient overexpression cell lysate was tested with Anti-MTHFD1 antibody ([H00004522-B01](#)) by Western Blots.  
SDS-PAGE Gel  
MTHFD1 transfected lysate.  
Western Blot  
Lane 1: MTHFD1 transfected lysate ( 102.96 KDa)  
Lane 2: Non-transfected lysate.

|                     |                                                                                                           |
|---------------------|-----------------------------------------------------------------------------------------------------------|
| Storage Buffer      | 1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue) |
| Storage Instruction | Store at -80°C. Aliquot to avoid repeated freezing and thawing.                                           |

## Applications

- Western Blot

## Gene Info — MTHFD1

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID       | <a href="#">4522</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| GeneBank Accession# | <a href="#">BC050420.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Protein Accession#  | <a href="#">AAH50420.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Gene Name           | MTHFD1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Gene Alias          | MTHFC, MTHFD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Gene Description    | methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Omim ID             | <a href="#">172460</a> <a href="#">601634</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Gene Ontology       | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Gene Summary        | This gene encodes a protein that possesses three distinct enzymatic activities, 5,10-methylenetetrahydrofolate 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. [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](#)