

MTHFD1 polyclonal antibody

Catalog # PAB11432 Size 100 ug

Applications



Western Blot (Tissue lysate)

MTHFD1 polyclonal antibody (Cat # PAB11432) (1 ug/mL) staining of human substantia nigra lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of MTHFD1.
Immunogen	A synthetic peptide corresponding to human MTHFD1 .
Sequence	RGDLNDCFIPCTPK
Host	Goat
Theoretical MW (kDa)	102
Reactivity	Human
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:1000) Western Blot (1-3 ug/mL) The optimal working dilution should be determined by the end user.

Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — MTHFD1

Entrez GeneID	4522
Protein Accession#	NP_005947.2
Gene Name	MTHFD1
Gene Alias	MTHFC, MTHFD
Gene Description	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, 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-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

Publication Reference

- [Oxidative DNA damage and level of thiols as related to polymorphisms of MTHFR, MTR, MTHFD1 in Alzheimer's and Parkinson's diseases.](#)

Dorszewska J, Florczak J, Rozycka A, Kempisty B, Jaroszewska-Kolecka J, Chojnacka K, Trzeciak WH, Kozubski W.
Acta Neurobiologiae Experimentalis 2007 Feb; 67(2):113.

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](#)
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- [Connective Tissue Diseases](#)
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- [Disease Progression](#)
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- [Migraine Disorders](#)
- [Migraine with Aura](#)
- [Musculoskeletal Diseases](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neural Tube Defects](#)
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