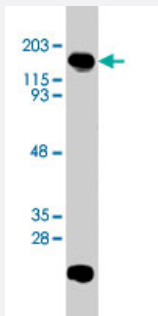


MTR polyclonal antibody

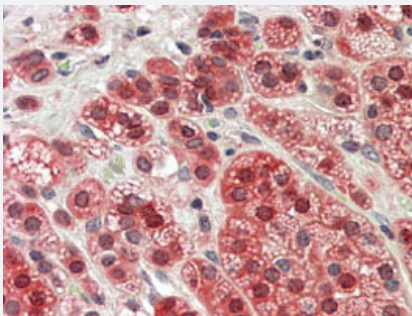
Catalog # PAB6022 Size 100 ug

Applications



Western Blot (Cell lysate)

MTR polyclonal antibody (Cat # PAB6022) staining (2 ug/mL) of HeLa lysate (RIPA buffer, 1.4E5 cells per lane). Detected by western blot using chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of human adrenal gland with MTR polyclonal antibody (Cat # PAB6022) (3.8 ug/mL). Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of MTR.
Immunogen	A synthetic peptide corresponding to human MTR.
Sequence	C-VEKWLGPILGYDTD
Host	Goat
Theoretical MW (kDa)	139
Reactivity	Human
Form	Liquid

Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)(3-5 ug/mL) ELISA (1:32000) 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.

Applications

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MTR polyclonal antibody (Cat # PAB6022) staining (2 ug/mL) of HeLa lysate (RIPA buffer, 1.4E5 cells per lane). Detected by western blot using chemiluminescence.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — MTR

Entrez GeneID	4548
Protein Accession#	NP_000245
Gene Name	MTR
Gene Alias	FLJ33168, FLJ43216, FLJ45386, MS
Gene Description	5-methyltetrahydrofolate-homocysteine methyltransferase
Omim ID	119530 156570 190685 250940 601634

Gene Ontology

[Hyperlink](#)

Gene Summary

MTR encodes the enzyme 5-methyltetrahydrofolate-homocysteine methyltransferase. This enzyme, also known as cobalamin-dependent methionine synthase, catalyzes the final step in methionine biosynthesis. Mutations in MTR have been identified as the underlying cause of methylcobalamin deficiency complementation group G. [provided by RefSeq]

Other Designations

5-methyltetrahydrofolate-homocysteine methyltransferase 1|cobalamin-dependent methionine synthase|methionine synthase|vitamin-B12 dependent methionine synthase

Publication Reference

- [Folic acid deficiency induces premature hearing loss through mechanisms involving cochlear oxidative stress and impairment of homocysteine metabolism.](#)

Martinez-Vega R, Garrido F, Partearroyo T, Cediell R, Zeisel SH, Martinez-Alvarez C, Varela-Moreiras G, Varela-Nieto I, Pajares MA.

FASEB Journal 2015 Feb; 29(2):418.

Application: WB, Mouse, Cochlear

- [Analysis of subcellular \[57Co\] cobalamin distribution in SH-SY5Y neurons and brain tissue.](#)

Zhao H, Ruberu K, Li H, Garner B.

Journal of Neuroscience Methods 2013 Jul; 217(1-2):67.

Application: WB, Human, Neuroblastoma, Fibrosarcoma cells

- [Human methionine synthase. cDNA cloning, gene localization, and expression.](#)

Chen LH, Liu ML, Hwang HY, Chen LS, Korenberg J, Shane B.

The Journal of Biological Chemistry 1997 Feb; 272(6):3628.

Pathway

- [Cysteine and methionine metabolism](#)
- [Metabolic pathways](#)
- [One carbon pool by folate](#)

Disease

- [Abnormalities](#)

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adrenoleukodystrophy](#)
- [Alzheimer disease](#)
- [Anemia](#)
- [Aortic Aneurysm](#)
- [Arterial Occlusive Diseases](#)
- [Arthritis](#)
- [Atherosclerosis](#)
- [Atrial Fibrillation](#)
- [Autistic Disorder](#)
- [Avitaminosis](#)
- [Azoospermia](#)
- [Bipolar Disorder](#)
- [Birth Weight](#)
- [Bone Neoplasms](#)
- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Central Nervous System Neoplasms](#)
- [Cerebrovascular Accident](#)

- [Cerebrovascular Disorders](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Choroidal Neovascularization](#)
- [Chromosome Aberrations](#)
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- [Cleft Palate](#)
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- [Cognition Disorders](#)
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- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Congenital Abnormalities](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Coronary Stenosis](#)
- [Crohn Disease](#)
- [Data Display](#)
- [Demyelinating Diseases](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Diseases in Twins](#)
- [DNA Damage](#)
- [Down Syndrome](#)
- [Ductus Arteriosus](#)

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- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Exfoliation Syndrome](#)
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- [Gastrointestinal Neoplasms](#)
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- [Glioblastoma](#)
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- [Heart Defects](#)
- [Heart Septal Defects](#)
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- [Mental Status Schedule](#)
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- [Osteosarcoma](#)
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- [Ovarian Neoplasms](#)
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- [Pancreatic Neoplasms](#)
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- [Phenylketonuria](#)
- [Phenylketonurias](#)
- [Placental Insufficiency](#)
- [Polycystic Ovary Syndrome](#)
- [Pre-Eclampsia](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)

- [Recurrence](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Rheumatic Nodule](#)
- [Schizophrenia](#)
- [Spinal Dysraphism](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Syndrome](#)
- [Thromboembolism](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Vascular Diseases](#)
- [Venous Thrombosis](#)
- [Vitamin B 12 Deficiency](#)
- [Vitamin B Deficiency](#)
- [Werner syndrome](#)