

**MTHFR Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1554a****Specification****MTHFR Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">P42898</a>
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	75kDa KDa

**Description**

The protein encoded by this gene catalyzes the conversion of 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate, a co-substrate for homocysteine remethylation to methionine. Genetic variation in this gene influences susceptibility to occlusive vascular disease, neural tube defects, colon cancer and acute leukemia, and mutations in this gene are associated with methylenetetrahydrofolate reductase deficiency.

**Immunogen**

Purified recombinant fragment of human MTHFR expressed in E. Coli. <br />

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**MTHFR Antibody - Additional Information**

**Gene ID** 4524

**Other Names**

Methylenetetrahydrofolate reductase, 1.5.1.20, MTHFR

**Dilution**

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

E~~1/10000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MTHFR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**MTHFR Antibody - Protein Information**

**Name** MTHFR ([HGNC:7436](#))

### Function

Catalyzes the conversion of 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate, a cosubstrate for homocysteine remethylation to methionine (PubMed:<a href="http://www.uniprot.org/citations/29891918" target="\_blank">29891918</a>). Represents a key regulatory connection between the folate and methionine cycles (Probable).

### MTHFR Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

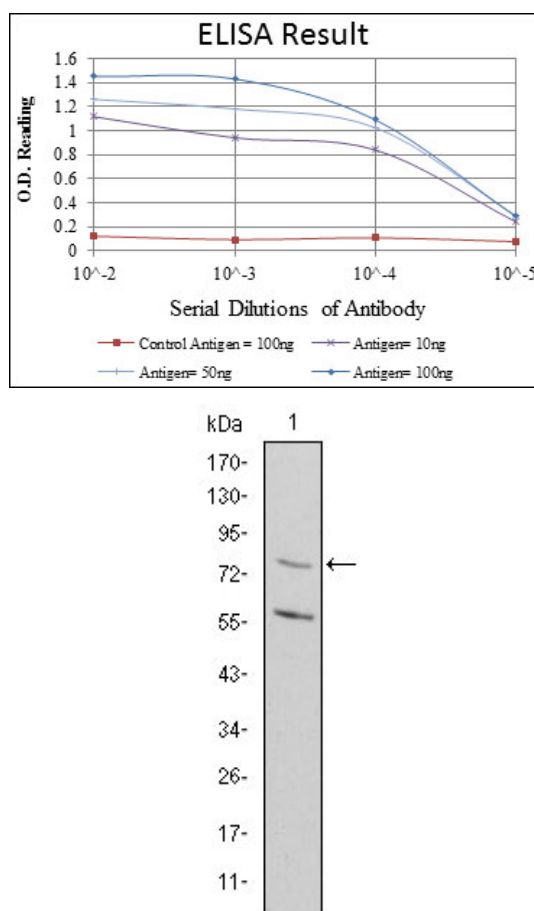


Figure 1: Western blot analysis using MTHFR mouse mAb against Rat Heart cell lysate.

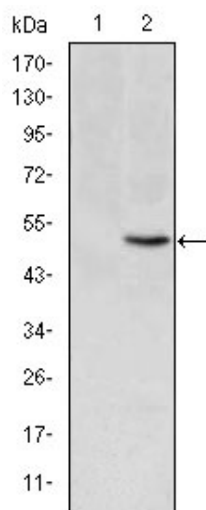


Figure 2: Western blot analysis using MTHFR mAb against HEK293 (1) and MTHFR(AA: 339-499)-hlgGfc transfected HEK293 (2) cell lysate.

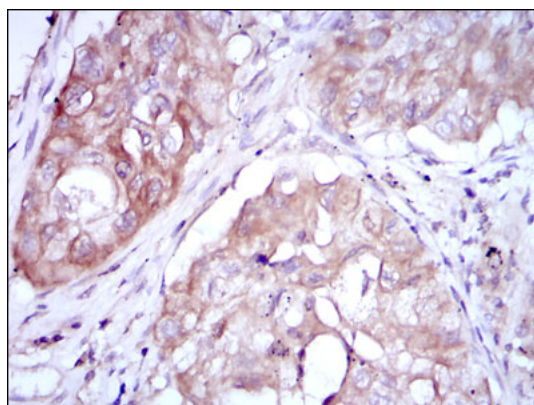


Figure 3: Immunohistochemical analysis of paraffin-embedded lung cancer using MTHFR mouse mAb with DAB staining.

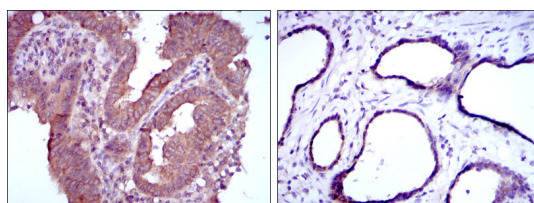


Figure 4: Immunohistochemical analysis of paraffin-embedded intima cancer tissues (left) and prostate tissues (right) using MTHFR mouse mAb with DAB staining.

## MTHFR Antibody - References

1. Kardiol Pol. 2008 Dec;66(12):1269-77.
2. Arq Bras Endocrinol Metabol. 2008 Nov;52(8):1374-81.