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# MTHFR Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1554a

## Product Information

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|---|---|
| **Application** | WB, IHC, E |
| **Primary Accession** | P42898 |
| **Reactivity** | Human, Rat |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 5D3 |
| **Isotype** | IgG1 |
| **Calculated MW** | 74597 |
| **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. |
| **Formulation** | Ascitic fluid containing 0.03% sodium azide. |

## Additional Information

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|---|---|
| **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. |

## Protein Information

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| **Name** | MTHFR ( HGNC:7436) |
| **Function** | Catalyzes the conversion of 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate, a cosubstrate for homocysteine remethylation to |

methionine (PubMed:29891918). Represents a key regulatory connection between the folate and methionine cycles (Probable).

## References

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

## Images

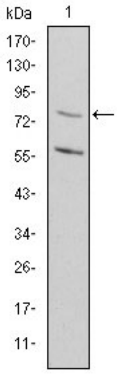


Figure 1: Western blot analysis using MTHFR mouse mAb against Rat Heart cell lysate.

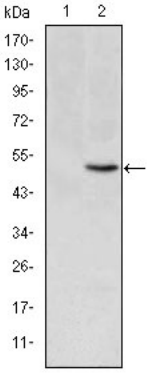


Figure 2: Western blot analysis using MTHFR mAb against HEK293 (1) and MTHFR(AA: 339-499)-hIgGFc transfected HEK293 (2) cell lysate.

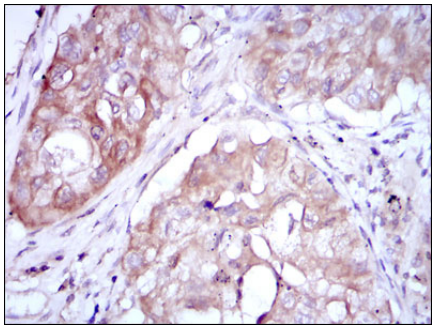

Figure 3: Immunohistochemical analysis of paraffin-embedded lung cancer using MTHFR mouse mAb with DAB staining.

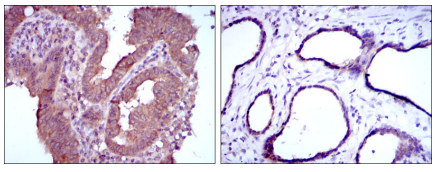

Figure 4: Immunohistochemical analysis of paraffin-embedded intima cancer tissues (left) and prostate tissues (right) using MTHFR mouse mAb with DAB staining.