

## MTHFR Monoclonal Antibody

|                              |  |
|------------------------------|--|
| <b>Catalog No :</b>          | YM0455   |
| <b>Reactivity :</b>          | Human;Rat  |
| <b>Applications :</b>        | WB;IHC;IF;ELISA  |
| <b>Target :</b>              | MTHFR  |
| <b>Fields :</b>              | >>One carbon pool by folate;>>Metabolic pathways;>>Antifolate resistance |
| <b>Gene Name :</b>           | MTHFR  |
| <b>Protein Name :</b>        | Methylenetetrahydrofolate reductase                                      |
| <b>Human Gene Id :</b>       | 4524   |
| <b>Human Swiss Prot No :</b> | P42898   |
| <b>Mouse Swiss Prot No :</b> | Q9WU20   |
| <b>Immunogen :</b>           | Purified recombinant fragment of human MTHFR expressed in E. Coli.       |
| <b>Specificity :</b>         | MTHFR Monoclonal Antibody detects endogenous levels of MTHFR protein.    |
| <b>Formulation :</b>         | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  |
| <b>Source :</b>              | Monoclonal, Mouse  |
| <b>Dilution :</b>            | WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200      |
| <b>Purification :</b>        | Affinity purification  |
| <b>Storage Stability :</b>   | -15°C to -25°C/1 year(Do not lower than -25°C)                           |
| <b>Molecularweight :</b>     | 75kD   |
| <b>Cell Pathway :</b>        | One carbon pool by folate;Methane metabolism;                            |

## P References :

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

## Background :

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.[provided by RefSeq, Oct 2009],

## Function :

catalytic activity:5-methyltetrahydrofolate + NAD(P)(+) = 5,10-methylenetetrahydrofolate + NAD(P)H.,cofactor:FAD.,disease:Defects in MTHFR are the cause of methylenetetrahydrofolate reductase deficiency (MTHFRD) [MIM:236250]. MTHFRD is autosomal recessive disorder with a wide range of features including homocysteinuria, homocysteinemia [MIM:603174], developmental delay, severe mental retardation, perinatal death, psychiatric disturbances, and later-onset neurodegenerative disorders.,disease:Defects in MTHFR may be a cause of susceptibility to folate-sensitive neural tube defects (folate-sensitive NTD) [MIM:601634]. The most common NTDs are open spina bifida (myelomeningocele) and anencephaly.,disease:Defects in MTHFR may be a cause of susceptibility to ischemic stroke [MIM:601367]; also known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event leadin

## Subcellular Location :

cytosol,synapse,

## Expression :

Brain,Liver,Lung,

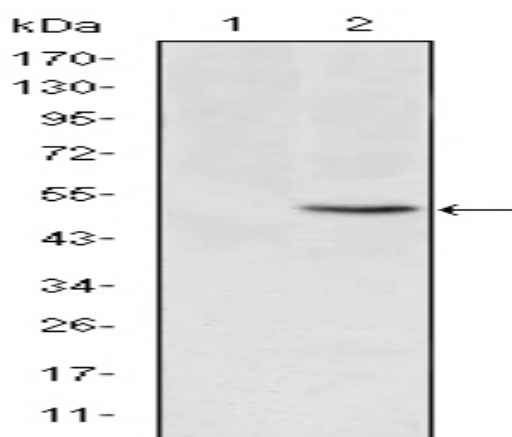
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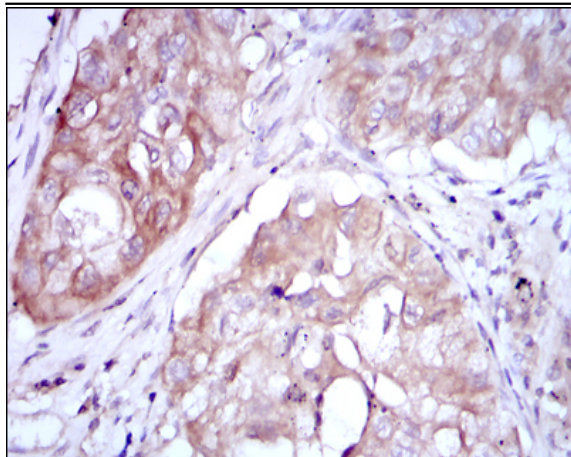
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## Products Images



Western Blot analysis using MTHFR Monoclonal Antibody against HEK293 (1) and MTHFR-hlgGfC transfected HEK293 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded lung cancer tissues with DAB staining using MTHFR Monoclonal Antibody.

