



# Recombinant Human Bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase, mitochondrial (MTHFD2)

<b>Product Code</b>	CSB-EP015156HU-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P13995
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	EAVVI SGRKLAQGIK QEVQRQEVEEW VASGNKRPHL SVILVGENPA SHSYVLNKTR AAAVVGINSE TIMKPASISE EELLNLINKL NNDDNVDGLL VQLPLPEHID ERRICNAVSP DKDVDGFHVI NVGRMCLDQY SMLPATPWGV WEIHKRTGIP TLGKNVVVAG RSKNVGMPA MLLHTDGAHE RPPGDATVTI SHRYTPKEQL KKHTILADIV ISAAGIPNLI TADMIKEGAA VIDVGINRVH DPVTAKPKLV GDVDFEGVRQ KAGYITVPG GVGPMTVAML MKNTIIAAKK VLRLEEREVL KSKELGVATN
<b>Source</b>	E.coli
<b>Target Names</b>	MTHFD2
<b>Protein Names</b>	Recommended name: Bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase, mitochondrial Including the following 2 domains: NAD-dependent methylenetetrahydrofolate dehydrogenase EC= 1.5.1.15 Methenyltetrahydrofolate cycl
<b>Expression Region</b>	36-350
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	This gene encodes a nuclear-encoded mitochondrial bifunctional enzyme with methylenetetrahydrofolate dehydrogenase and methenyltetrahydrofolate cyclohydrolase activities. The enzyme functions as a homodimer and is unique in its absolute requirement for magnesium and inorganic phosphate. Formation of the enzyme-magnesium complex allows binding of NAD. Alternative splicing results in two different transcripts, one protein-coding and the other not protein-coding. This gene has a pseudogene on chromosome 7.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.