

MTHFD2, 30-350aa, Human, His tag, E.coli

Cat.NO.: TP03042

3th Edition

Synonyms:Bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase, mitochondrial.

Description:MTHFD2 also known as Bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase, mitochondrial. MTHFD2 protein that possesses three distinct enzymatic activities, methylenetetrahydrofolate dehydrogenase, methenyltetrahydrofolate cyclohydrolase and formate–tetrahydrofolate ligase. Each of these activities catalyzes one of three sequential reactions in the interconversion of 1-carbon derivatives of tetrahydrofolate, which are substrates for methionine, thymidylate, and de novo purine syntheses. Recombinant human MTHFD2, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid, In Phosphate buffered saline (pH7.4) containing 20% glycerol, 1mM DTT.

Molecular Weight:37.2 kDa (344aa) confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMGSLAAVRNEAVVISGRKLAQQIKQEVQRQEVEEWVASGNKRPHLSVILVGENPAS
HSYVLNKTRAAAVVGINSETIMKPASISEEELLNLINKLNDDNVDGLLVQLPLPEHIDERRICNAVSPDKDVDGFHVI
NVGRMCLDQYSMLPATPWGVWEIIRKRTGIPTLGKNVVVAGRSKNVGMPIAMLLHTDGAHERPGGDATVTISHRYTP
KEQLKKHTILADIVISAAGIPNLITADMIKEGAAVIDVGINRVHDPVTAKPKLVGDVDFEGVRQKAGYITPVPGGVGPM
TVAMLMKNTIIAAKKVLRLEEREVLKSKELGVATN

Purity:> 95% by HPLC

Concentration:1 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.