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32-2333: Fumarase Recombinant Protein

Alternative Name : MCL,LRCC,HLRCC,MCUL1,FH,Fumarate hydratase,Fumarase.

Description

Source : Escherichia Coli. Fumarase Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 467 amino acids (44-510) and having a molecular mass of 50.2 kDa. Fumarate Hydratase is purified by proprietary chromatographic techniques. Fumarase is an enzymatic factor of Krebs cycle, which catalyzes the formation of L-malate from fumarate. Fumarase exists in both a cytosolic form and an N-terminal extended form, differing only in the translation start site used. The N-terminal extended form is aimed to the mitochondrion, where the removal of the extension results in the same form as in the cytoplasm. Fumarase is similar to a number of thermostable Class-2 fumarases and functions as a homotetramer. Mutations in the Fumarase gene causes fumarase deficiency and leads to progressive encephalopathy, cerebral atrophy and developmental delay. Fumarase enzyme is also thought to act as a tumor suppressor. Leydig cell tumors are caused by Fumarase mutations and represents one of the first reports of germline mutations in any type of adult testicular tumor.

Product Info

Amount :	50 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	The Fumarase protein solution (1mg/ml) contains 20mM Tris-HCl, pH-8.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid :	MASQNSFRIE YDTFGELKVP NDKYYGAQTV RSTMNFKIGG VTERMPTPVI KAFGILKRAA AEVNQDYGLD PKIANAIMKA ADEVAEGKLN DHFPLVVWQT GSGTQTNMNV NEVISNRAIE MLGGELGSKI PVHPNDHVNK SQSSNDTFPT AMHIAAAIEV HEVLLPGLQK LHDALDAKSK EFAQIIKIGR THTQDAVPLT LGQEFSGYVQ QVKYAMTRIK AAMPRIYELA AGGTAVGTGL NTRIGFAEKV AAKVAALTGL PFVTAPNKFE ALAAHDALVE LSGAMNTTAC SLMKIANDIR FLGSGPRSGL GELILPENEP GSSIMPGKVN PTQCEAMTMV AAQVMGNHVA VTVGGSNGHF ELNVFKPMMI KNVLHSARLL GDASVSFTEN CVVGIQANTE RINKLMNESL MLVTALNPHI GYDKAAKIAK TAHKNGSTLK ETAIELGYLT AEQFDEWVKP KDMLGPK.

Application Note

Specific activity is > 25 unit/mg, and is defined as the amount of enzyme that cleaves 1umole of L-Malate to Fumarate per minute at pH 7.5 at 37Ã□Â°C.