

Recombinant Human Fumarate Hydratase

Cat. No. FH-112H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Fumarase was expressed in E.coli and was purified by conventional chromatography techniques, 50.2kDa (467aa).
Species	Human
Source	E.coli
Description	Fumarase (Fumarate hydratase) is an enzyme that catalyzes the reversible hydration/dehydration of fumarate to S-malate and is involved in the tricarboxylic acid (TCA), or Krebs cycle. This enzyme exists in both a cytosolic form and an N-terminal extended mitochondrial form. The N-terminal extended form is targeted to the mitochondrion, where the removal of the extension is the same form as in the cytoplasm. Fumarase deficiency can lead to progressive encephalopathy, cerebral atrophy and developmental delay and this enzyme also is thought to act as a tumor suppressor.
Form	Liquid. In 20 mM Tris-HCl buffer (pH 8.0)
Purity	> 95% by SDS - PAGE.
Concentration	1 mg/ml (determined by Bradford assay)
Endotoxin Level	< 1.0 EU per 1 µg of protein (determined by LAL method)
Sequences of amino	MASQNSFRIE YDTFGELKVP NDKYYGAQTV RSTMNFKIGG VTERMPTPVI

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 45-1 Ramsey Road, Shirley, NY 11967, USA

acids

KAFGILKRAA AEVNQDYGLD PKIANAIMKA ADEVAEGKLNDFH PLVV WQT
 GSGTQTNMNV NEVISNRAIE MLGGELGSKI PVHPNDHVNK SQSSNDTFPT
 AMHIAAAIEV HEVLLPGLQK LHDALDAKSK EFAQIIKIGR THTQD AVPLT
 LGQEFSGYVQ QVKYAMTRIK AAMPRIYELA AGGTAVGTGL NTRIGFAEKV
 AAKVAALTGL PFVTAPNKFE ALAAHDALVE LSGAMNTTAC SLM KIA
 NDIRFLGSGPRSGLGELILPENEP GSSIMPGKVN PTQCEAMTMV AAQVMGNHVA
 VTVGGSNGHF ELNVFKPMMI KNVLHSARLL GDASVSFTEN CVVGIQANTE
 RINKLMNESL MLVTALNPHI GYDKAAKIAK TAHKNGSTLK ETAIELGYLT
 AEQFDEWVKP KDMLGPK

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.

GENE INFORMATION

Gene Name

FH fumarate hydratase [Homo sapiens]

Synonyms

MCL; LRCC; HLRCC; MCUL1; FH; fumarate hydratase; fumarase;
 OTTHUMP00000037573; EC 4.2.1.2; Fumarase.

Gene ID

2271

mRNA Refseq

NM_000143

Protein Refseq

NP_000134

MIM

136850

UniProt ID

P07954

Chromosome

1q42.1

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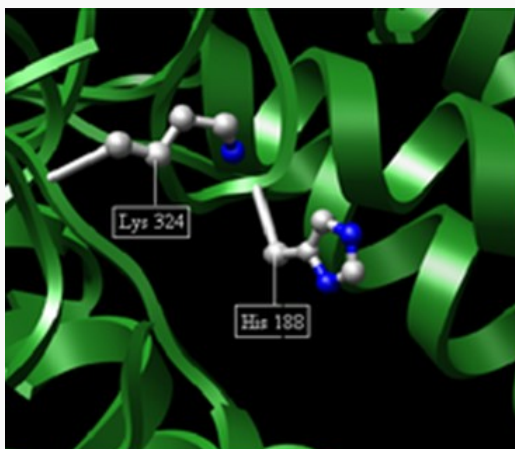
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Location

Function

fumarate hydratase activity, fumarate hydratase activity, lyase activity

Fumarase active site



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