

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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

acids

KAFGILKRAA AEVNQDYGLD PKIANAIMKA ADEVAEGKLNDHF 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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

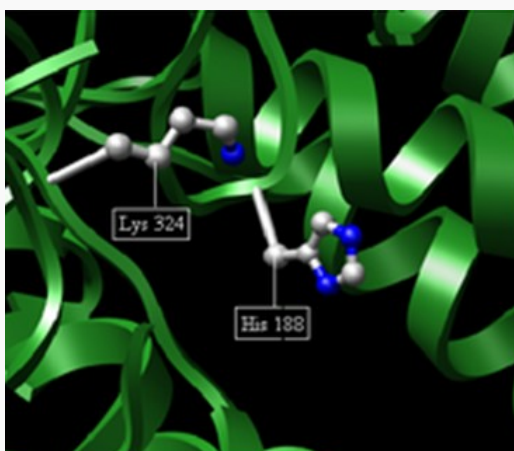
 45-1 Ramsey Road, Shirley, NY 11967, USA

Location

Function

fumarate hydratase activity, fumarate hydratase activity, lyase activity

Fumarase active site



Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

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