

Human Recombinant Fumarase

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|-------------------------|---|--------|
| CATALOG #: | 6384-100 | 100 µg |
| ALTERNATE NAMES: | Fumarate hydratase, FH, HLRCC, LRCC, MCL, MCUL1. | |
| SOURCE: | E.Coli | |
| PURITY: | > 95% by SDS - PAGE | |
| MOL. WEIGHT: | 50.2 kDa (467 aa, 44-510 aa) | |
| FORMULATION: | 1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0). | |
| ENDOTOXIN LEVEL: | < 1.0 EU per 1 µg of protein (determined by LAL method) | |

STORAGE CONDITIONS:

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.

DESCRIPTION:

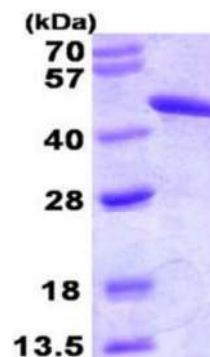
Fumarase (Fumarate hydratase) is an enzyme that catalyzes the reversible hydration/dehydration of fumarate to S-malate and is involved in the tricarboxylic acid (TCA), or Krebs cycle. This enzyme exists in both a cytosolic form and an N-terminal extended mitochondrial form. The N-terminal extended form 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.

AMINO ACID SEQUENCE:

MASQNSFRIE YDTFGELKVP NDKYYGAQTV RSTMNFKIGG VTERMPTPVI KAFGILKRAA
AEVNQDYGLD PKIANAIMKA ADEVAEGKLN DHFPLVVWQT GSGTQTNMNV NEVISNRAIE
MLGGELGSKI PVHPNDHVNK SQSSNDTFPT AMHIAAAIEV HEVLLPGLQK LHDALDAKSK
EFAQIIGR THTQDAVPLT LGQEFSGYVQ QVKYAMTRIK AAMPRIYELA AGGTAVGTGL
NTRIGFAEKV AAKVAALTGL PFVTAPNKFE ALAAHDALVE LSGAMNTTAC SLMKIANDIR
FLGSGPRSGL GELILPENEP GSSIMPGKVN PTQCEAMTMV AAQVMGNHVA
VTVGGSNGHF ELNVFKPMMI KNLVHSARLL GDASVSFTEN CVVGIQANTE RINKLMNESL
MLVTALNPHI GYDKAAKIAK TAHKNGSTLK ETAIELGYLT AEQFDEWVKP KDMLGPK

BIOLOGICAL ACTIVITY:

Specific activity is > 1.0 unit/mg, and is defined as the amount of enzyme that cleaves 1 µmole of L-Malate to Fumarate per minute at pH 7.5 at 25°C



15% SDS-PAGE (3µg)

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RELATED PRODUCTS:

- Mcl-1 Antibody (Cat. No. 3035-100)
- Mcl-1 Blocking Peptide (Cat. No. 3035BP-100)
- Bad Antibody (Cat. No. 3030-100)
- Bok Antibody (Cat. No. 3043-100)
- Noxa Antibody (Cat. No. 3665-100)
- TG003 (Cat. No. 1905-5, -25)

FOR RESEARCH USE ONLY! Not to be used in humans.