

Recombinant Human FH, His-tagged

Cat. No. FH-165H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human Fumarase /FH Protein (rh Fumarase /FH) Ala 45 - Lys 510 (Accession # AAH03108) was produced in E.coli cells.
Species	Human
Source	E.coli
ProteinLength	45-510 a.a.
Description	Fumarate hydratase, mitochondrial is also known as Fumarase or FH, which belongs to the class-II fumarase/aspartase family and Fumarase subfamily. Fumarase is a homotetramer protein which is expressed in red blood cells. There are two substrate-binding sites: the catalytic A site, and the non-catalytic B site that may play a role in the transfer of substrate or product between the active site and the solvent. Alternatively, the B site may bind allosteric effectors. Fumarase also acts as a tumor suppressor.
Form	Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5. Normally Mannitol or Trehalose are added as protectants before lyophilization.
Molecular Mass	rh Fumarase /FH is fused with a polyhistidine tag at the C-terminus, and has a calculated MW of 51 kDa. The predicted N-terminus is Ala 45. DTT-reduced Protein migrates as 47 kDa in SDS-PAGE.
Endotoxin	Less than 1.0 EU per µg of the rh Fumarase /FH by the LAL method.

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

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Purity	>95% as determined by SDS-PAGE.
Storage	Avoid repeated freeze-thaw cycles.No activity loss was observed after storage at:In lyophilized state for 1 year (4oC); After reconstitution under sterile conditions for 3 months (-70oC).
Reconstitution	See Certificate of Analysis for reconstitution instructions and specific concentrations.
GENE INFORMATION	
Gene Name	FH fumarate hydratase [Homo sapiens]
Official Symbol	FH
Synonyms	FH; fumarate hydratase; fumarate hydratase, mitochondrial; fumarase; MCL; LRCC; HLRCC; MCUL1;
Gene ID	2271
mRNA Refseq	NM_000143
Protein Refseq	NP_000134
MIM	136850
UniProt ID	P07954
Chromosome Location	1q42.1
Pathway	Citrate cycle (TCA cycle), organism-specific biosystem; Citrate cycle (TCA cycle), conserved biosystem; Citrate cycle, second carbon oxidation, 2-oxoglutarate

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=>oxaloacetate, organism-specific biosystem; Citrate cycle, second carbon oxidation, 2-oxoglutarate => oxaloacetate, conserved biosystem; Citric acid cycle (TCA cycle), organism-specific biosystem;

Function

fumarate hydratase activity; lyase activity;

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