

## Recombinant Human FH, His-tagged

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

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human Fumarase /FH Protein (rh Fumarase /FH) Ala 45 - Lys 510 (Accession # AAH03108) was produced in E.coli cells.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	45-510 a.a.
<b>Description</b>	<p>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.</p>
<b>Form</b>	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.
<b>Molecular Mass</b>	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.
<b>Endotoxin</b>	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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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

<b>Purity</b>	>95% as determined by SDS-PAGE.
<b>Storage</b>	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).
<b>Reconstitution</b>	See Certificate of Analysis for reconstitution instructions and specific concentrations.

## GENE INFORMATION

<b>Gene Name</b>	FH fumarate hydratase [ Homo sapiens ]
<b>Official Symbol</b>	FH
<b>Synonyms</b>	FH; fumarate hydratase; fumarate hydratase, mitochondrial; fumarase; MCL; LRCC; HLRCC; MCUL1;
<b>Gene ID</b>	2271
<b>mRNA Refseq</b>	NM_000143
<b>Protein Refseq</b>	NP_000134
<b>MIM</b>	136850
<b>UniProt ID</b>	P07954
<b>Chromosome Location</b>	1q42.1
<b>Pathway</b>	Citrate cycle (TCA cycle), organism-specific biosystem; Citrate cycle (TCA cycle), conserved biosystem; Citrate cycle, second carbon oxidation, 2-oxoglutarate

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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



=>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;

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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