# Recombinant Human Fumarate hydratase, mitochondrial (FH)

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| **Product Code** | CSB-YP008659HU |
| **Storage** | Store at -20°C, for extended storage, conserve at -20°C or -80°C. |
| **Uniprot No.** | P07954 |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Homo sapiens (Human) |
| **Purity** | ≥85% (SDS-PAGE) |
| **Sequence** | ASQNSF RIEYDTFGEL KVPNDKYYGA QTVRSTMNFK IGGVTERMPT PVIKAFGILK RAAAEVNQDY GLDPKIANAI MKAADEVAEG KLNDHFPLVV WQTGSGTQTN MNVNEVISNR AIEMLGGELG SKIPVHPNDH VNKSQSSNDT FPTAMHIAAA IEVHEVLLPG LQKLHDALDA KSKEFAQIIK IGRTHTQDAV PLTLGQEFSG YVQQVKYAMT RIKAAMPRIY ELAAGGTAVG TGLNTRIGFA EKVAAKVAAL TGLPFVTAPN KFEALAAHDA LVELSGAMNT TACSLMKIAN DIRFLGSGPR SGLGELILPE NEPGSSIMPG KVNPTQCEAM TMVAAQVMGN HVAVTVGGSN GHFELNVFKP MMIKNVLHSA RLLGDASVSF TENCVVGIQA NTERINKLMN ESLMLVTALN PHIGYDKAAK IAKTAHKNGS TLKETAIELG YLTAEQFDEW VKPKDMLGPK |
| **Source** | Yeast |
| **Target Names** | FH |
| **Protein Names** | Recommended name: Fumarate hydratase, mitochondrial Short name= Fumarase EC= 4.2.1.2 |
| **Expression Region** | 45-510 |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | Tag type will be determined during the manufacturing process. |
| **Protein Length** | Full Length of Mature Protein |
| **Target Details** | This protein is an enzymatic component of the tricarboxylic acid (TCA) cycle, or Krebs cycle, and catalyzes the formation of L-malate from fumarate. It exists in both a cytosolic form and an N-terminal extended form, differing only in the translation start site used. The N-terminal extended form is targeted to the mitochondrion, where the removal of the extension generates the same form as in the cytoplasm. It is similar to some thermostable class II fumarases and functions as a homotetramer. Mutations in this gene can cause fumarase deficiency and lead to progressive encephalopathy. |
| **Reconstitution** | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final |

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| | concentration of glycerol is 50%. Customers could use it as reference. |
| **Shelf Life** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |