

## 32-7599: Recombinant Human FAD-linked Sulphydryl Oxidase ALR/GFER (N-6His)

**Gene :** GFER  
**Gene ID :** 2671  
**Uniprot ID :** P55789

### Description

Source: E.coli.  
MW :17.3kD.

Recombinant Human GFER is produced by our E.coli expression system and the target gene encoding Met1-Asp125 is expressed with a 6His tag at the N-terminus. GFER is a hepatotrophic growth factor and flavin-linked sulphydryl oxidase which belongs to the Erv1/ALR family of proteins. GFER is widely expressed in various human tissues. They are two isoforms of this protein. Isoform 1 could regenerate the redox-active disulfide bonds in CHCHD4/MIA40, a chaperone essential for disulfide bond formation and protein folding in the mitochondrial intermembrane space. The reduced form of CHCHD4/MIA40 forms a transient intermolecular disulfide bridge with GFER/ERV1, resulting in regeneration of the essential disulfide bonds in CHCHD4/MIA40, while GFER/ERV1 becomes re-oxidized by donating electrons to cytochrome c or molecular oxygen. Isoform 2 may act as an autocrine hepatotrophic growth factor promoting liver regeneration. GFER could also induce the expression of S-adenosylmethionine decarboxyl-ase and ornithine decarboxylases (ODC). S-adenosylmethionine decarboxyl-ase and ornithine decarboxylases play an important role in the synthesis of polyamines.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of PBS,pH7.4.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** MGSSHHHHHSSGLVPRGSHMMRTQQKRDTKFREDCPPDREELGRHSWAVLHTLAAYPDLPTPEQQQDM AQFIHLFSKFYPCEECAEDLRKRLCRNHPDTRTRACFTQWLCHLHNEVNRKLGKPDFDCSKVDERWRDQWKD GSCD

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.