

Human CellExp GFER/HPO/ALR, human recombinant protein

GFER, ALR, ERV1, HERV1, HPO, HPO1, HPO2, HSS, Hepatopoietin Catalog # PBV10894r

Specification

Human CellExp GFER/HPO/ALR, human recombinant protein - Product info

Primary Accession P55789

Calculated MW of 15.2 kDa with no tag.

The predicted N-terminus is Met 81. DTT-reduced protein migrates as 16.0 kDa.

KDa

Human CellExp GFER/HPO/ALR, human recombinant protein - Additional Info

Gene ID 2671
Gene Symbol GFER

Other Names

GFER, ALR, ERV1, HERV1, HPO, HPO1, HPO2, HSS, Hepatopoietin

Gene Source Human

Source HEK 293 cells
Assay&Purity SDS-PAGE; ≥92%

Assay2&Purity2 N/A;
Recombinant Yes

Target/Specificity

GFER

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 100 μ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format

Lyophilized powder

Storage

-20°C; Lyophilized from 0.22 μ m filtered solution in 20 mM Tris, 100 mM NaCl, pH 8.0. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

Human CellExp GFER/HPO/ALR, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence





• <u>Immunoprecipitation</u>

- Flow Cytomety
- Cell Culture

Human CellExp GFER/HPO/ALR, human recombinant protein - Images

Human CellExp GFER/HPO/ALR, human recombinant protein - Background

Growth factor, augmenter of liver regeneration (GFER) is also known as FAD-linked sulfhydryl oxidase ALR, which belongs to the Erv1/ALR family of proteins. This family can be found in higher and lower eukaryotes. There are two isoform of GFER: Isoform 1 and isoform 2. Isoform 2 missing 1 – 80 aa. Isoform 1 is mainly located in mitochondrion intermembrane space, while Isoform 2 is secreted to cytoplasm. Isoform 1 of GFER regenerates 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. The isoform 2 of GFER may act as an autocrine hepatotrophic growth factor promoting liver regeneration.