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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	**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 µg/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 µm 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

- Immunoprecipitation
- 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.