## **BioVision**

## GFER/HPO/ALR, Human CellExp™, human recombinant

CATALOG #:	7269-10 10 µg
ALTERNATE NAMES:	GFER, ALR, ERV1, HERV1, HPO, HPO1, HPO2, HSS, Hepatopoietin
SOURCE:	HEK 293 cells (Met 81 - Asp 205)
PURITY:	≥ 92% by SDS-PAGE gel
MOL. WEIGHT:	Calculated MW of 15.2 kDa with no tag. The predicted N-terminus is Met 81. DTT-reduced protein migrates as 16.0 kDa.
ENDOTOXIN LEVEL:	<1EU/µg by LAL method
FORM:	Lyophilized

**FORMULATION:** 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.

**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 100  $\mu$ 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.

**DESCRIPTION**: 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

electrons to cytochrome c or molecular oxygen. The isoform 2 of GFER may act as an autocrine hepatotrophic growth factor promoting liver regeneration.



Human recombinant GFER/HPO/ALR

## RELATED PRODUCTS:

- Cytokines, Growth Factors & Hormones
- Proteins and Enzymes

FOR RESEARCH USE ONLY! Not to be used in humans.



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