

# Recombinant Protein Technical Manual Recombinant Human Hemopexin/HPX Protein (His Tag) RPES2319

### **Product Data:**

**Product SKU:** RPES2319 **Size:** 10μg

Species: Human Cells

Uniprot: P02790

### **Protein Information:**

Molecular Mass: 50.1 kDa

AP Molecular Mass: 60-90 kDa

Tag: C-His

**Bio-activity:** 

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue

ice. Upon receipt, store it immediately at<-20°C.

**Formulation:** Supplied as a 0.2 μm filtered solution of 20mM MES,150mM NaCl,pH5.5.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** 

**Synonyms:** Hemopexin;Hpx;Hpxn

# Immunogen Information:

**Sequence:** Thr24-His462

# Background:

Hemopexin (HPX) is plasma glycoprotein belongs to the family of the acute-phase proteins whose synthesis is induced after an inflammatory event. Hemopexin with two four-bladed beta -propeller folds has been found in other proteins including collagenases and provides sites for protein-protein interactions. The liver is the major synthesizing organ. Hemopexin participates in maintaining and recycling the iron pool by utilizing its high binding affinity toward heme composed of protoporphyrin IX and iron. It also functions in preventing oxidation caused by heme after hemolysis. Hydrophobic heme molecules can intercalate into lipid membranes and participate in the oxidation of lipid membrane components through the Fenton reaction resulting in lipid peroxidation. Hemopexin undergoes a conformational change upon the binding of heme. The conformational change allows hemopexin to interact with a specific receptor, forming a complex which is then internalized. Heme concentrations in plasma increase after hemolysis, which is associated with several pathological conditions such as reperfusion injury and ischemia.