

# **Recombinant Protein Technical Manual**

# Recombinant Human Hexokinase-3/HK3 Protein (His & GST Tag)

**RPES1397** 

#### **Product Data:**

**Product SKU:** RPES1397 **Size:** 50μg

Species: Human Expression host: Baculovirus-Insect Cells

Uniprot: P52790

#### **Protein Information:**

Molecular Mass: 127 kDa

AP Molecular Mass: 115 kDa

Tag: N-His & GST

**Bio-activity:** 

**Purity:** > 85 % 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/gel packs. Upon receipt, store it immediately at<-20°C.

**Formulation:** Supplied as sterile 50mM Tris, 100mM NaCl, pH 7.4

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

**Application:** 

**Synonyms:** HKIII;HXK3

## Immunogen Information:

Sequence: Met 1-Val 923

## Background:

Hexokinase-3, also known as Hexokinase type III, HKIII and HK3, is a protein which belongs to the hexokinase family. Hexokinase-3 / HK3 is an enzyme which in humans is encoded by the HK2 gene. Hexokinases phosphorylate glucose to produce glucose 6-phosphate, committing glucose to the glycolytic pathway. In mammalian tissues hexokinase exists as four isoenzymes encoded by distinct genes. These proteins are homologous and are organized in two homologous domains, with the exception of hexokinase type IV which has only one. This organization is believed to be the result of a duplication and tandem fusion event involving the gene encoding for the ancestral hexokinase. The gene encodes hexokinase-3. Similar to hexokinases and hexokinases-2, this allosteric enzyme is inhibited by its product glucose 6-phosphate.