



Recombinant Protein Technical Manual

**Recombinant Human Sedoheptulokinase/SHPK
Protein (His Tag)**
RPES4112

Product Data:

Product SKU: RPES4112

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q9UHI6

Protein Information:

Molecular Mass: 52.5 kDa

AP Molecular Mass: 53 kDa

Tag: C-6His

Bio-activity:

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

Endotoxin: < 1.0 EU per µg 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 a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH7.4.

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

Application:

Synonyms: Sedoheptulokinase;SHK;Carbohydrate kinase-like protein;SHPK;CARKL

Immunogen Information:

Sequence: Met 1-Ser478

Background:

Sedoheptulokinase (SHPK) belongs to the FGGY kinase family, and is mainly located in cytoplasm. SHPK is strongly expressed in liver, kidney and pancreas. It is expressed at lower levels in placenta and heart, and very weakly expressed in lung and brain. SHPK catalyzes the chemical reaction: $\text{ATP} + \text{sedoheptulose} = \text{ADP} + \text{sedoheptulose 7-phosphate}$. It can transform sedoheptulose to sedoheptulose 7-phosphate in the condition of ATP, and acts as a modulator of macrophage activation through control of glucose metabolism. In addition, It also can be down-regulated by LPS.