



Recombinant Protein Technical Manual  
Recombinant Mouse PDK4 Protein (His & GST Tag)  
RPES0513

#### Product Data:

**Product SKU:** RPES0513

**Size:** 20µg

**Species:** Mouse

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** O70571

#### Protein Information:

**Molecular Mass:** 74.4 kDa

**AP Molecular Mass:** 65 kDa

**Tag:** N-His-GST

**Bio-activity:**

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein 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 20mM Tris, 500mM NaCl, 10% glycerol, pH 8.0

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

**Application:**

**Synonyms:** AV005916

## Immunogen Information:

**Sequence:** Met1-Val412

## Background:

Pyruvate dehydrogenase kinase 4 (PDK4) is a mitochondrial protein that regulates the TCA cycle. PDK4, a vital mitochondrial protein, controls the switch between glycolysis and oxidative phosphorylation based upon nutrient availability. Pyruvate dehydrogenase kinase 4 (PDK4) mRNA has been reported as an up-regulated gene in the heart and skeletal muscle of carnitine-deficient juvenile visceral steatosis (JVS) mice under fed conditions. PDK4 plays an important role in the inhibition of glucose oxidation via the phosphorylation of pyruvate dehydrogenase complex (PDC). PDK4 gene expression is stimulated by thyroid hormone (T<sub>3</sub>), glucocorticoids, and long chain fatty acids.