

Recombinant Protein Technical Manual

Recombinant Human GALK1/Galactokinase Protein (His Tag)

RPES2611

Product Data:

Product SKU: RPES2611 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: P51570

Protein Information:

Molecular Mass: 43.3 kDa

AP Molecular Mass: 45 kDa

Tag: C-His

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

Formulation: Supplied as a 0.2 μm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 8.0.

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

Application:

Synonyms: Galactokinase; Galactose Kinase; GALK1; GALK

Immunogen Information:

Sequence: Met1-Leu392

Background:

Galactokinase belongs to the GHMP kinase family and GalK subfamily. Galactokinase is more important to the galactose metabolism pathway. It modifies galactose to create a similar molecule called Galactose-Phosphate. Thus, a series of additional steps converts Galactose-Phosphate to another simple sugar Glucose, which is the main energy source for most cells. Galactokinase deficiency results in Galactosemia II, an autosomal recessive deficiency characterized by congenital cataracts during infancy and presentle cataracts in the adult population. The cataracts are secondary to accumulation of Galactitol in the lenses.