

## Recombinant Human GALK1/Galactokinase Protein (His Tag)

**Catalog Number: PKSH033673**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

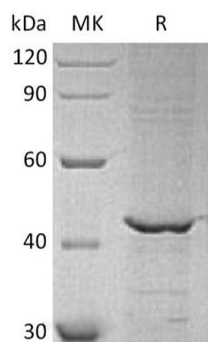
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human GALK1; Galactokinase protein Met1-Leu392, with an C-terminal His
<b>Calculated MW</b>	43.3 kDa
<b>Observed MW</b>	45 kDa
<b>Accession</b>	P51570
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 85 % as determined by reducing SDS-PAGE.
<b>Concentration</b>	Subject to label value.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	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.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.

### Data



> 85 % as determined by reducing SDS-PAGE.

### 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-1-Phosphate. Thus, a series of additional steps converts Galactose-1-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 presenile cataracts in the adult population. The cataracts are secondary to accumulation of Galactitol in the lenses.