

Hexokinase 4 Human, His-tagged, Recombinant, E.coli**Cat.NO.: TP02444**

3th Edition

Synonyms:Hexokinase type IV, Glucokinase, GCK

Description:Hexokinase is the first enzyme in the glycolytic pathway, catalyzing the transfer of a phosphoryl group from ATP to glucose to form glucose-6-phosphate and ADP. In mammals, four distinct enzymes-types 1 to 4 hexokinases-have been identified. The enzyme is found in most cells, but there is tissue specificity for the particular type of hexokinase. Hexokinase4 is found in the liver and pancreatic beta-cells, where it is controlled by insulin (activation) and glucagon (inhibition). In pancreatic beta-cells, type IV enzyme acts as a glucose sensor to modify insulin secretion.

Form:Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Molecular Weight:54.3kDa (485aa)

Sequences:

MGSSHHHHHHSSGLVPRGSHMLDDRARMEEAAKKEKVEQILAEFQLQEEDLKKVMRRMQKEMDRGLRLETHEEAS
VKMLPTYVRSTPEGSEVGDFLSLDLGGTNFRVMLVKVGEEGEQWSVKTKHQMYSIPEDAMTGTAEMLFDYISEC
ISDFLDKHKMKHKKLPLGFTFSFPVRHEDIDKGILLNWTGFKASGAEGNNVGLLRDAIKRRGDFEMDVVAMVND
TVATMISCYYEDHQCEVGMIVGTGCNACYMEEMQNVELVEGDEGRMCVNTEWGAFGDSGELDEFLLFYDRLVDE
SSANPGQQLYEKLIGGKYMGEVLVRLVLLRLVDENLLFHGEASEQLRTRGAFETRFVSQVESDTGDRKQIYNILSTLG
LRPSTTDCDIVRRACESVSTRAAHMCSAGLAGVINRMRESRSEDVMRITVGVDGSVYKLHPSFKERFHASVRRRLTP
SCEITFIESEEGSGRGAALVSAVACKKACMLGQ

Purity:> 95% by HPLC

Concentration:1 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.