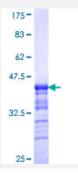


HK3 (Human) Recombinant Protein (Q01)

Catalog # H00003101-Q01 Size 25 ug, 10 ug

Applications



Specification	
Product Description	Human HK3 partial ORF (NP_002106, 1 a.a 90 a.a.) recombinant protein with GST-tag at N-termi nal.
Sequence	MDSIGSSGLRQGEETLSCSEEGLPGPSDSSELVQECLQQFKVTRAQLQQIQASLLGSMEQALRG QASPAPAVRMLPTYVGSTPHGTEQGD
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	35.64
Interspecies Antigen Sequence	Mouse (74); Rat (73)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — HK3	
Entrez GenelD	3101
GeneBank Accession#	NM_002115
Protein Accession#	NP_002106
Gene Name	HK3
Gene Alias	HKIII, HXK3
Gene Description	hexokinase 3 (white cell)
Omim ID	142570
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most gluco se metabolism pathways. This gene encodes hexokinase 3. Similar to hexokinases 1 and 2, this allosteric enzyme is inhibited by its product glucose-6-phosphate. [provided by RefSeq
Other Designations	ATP:D-hexose 6-phosphotransferase hexokinase 3

Pathway

- Amino sugar and nucleotide sugar metabolism
- Biosynthesis of alkaloids derived from histidine and purine
- Biosynthesis of alkaloids derived from ornithine
- Biosynthesis of alkaloids derived from shikimate pathway



- Biosynthesis of alkaloids derived from terpenoid and polyketide
- Biosynthesis of phenylpropanoids
- Biosynthesis of plant hormones
- Biosynthesis of terpenoids and steroids
- Fructose and mannose metabolism
- Galactose metabolism
- Glycolysis / Gluconeogenesis
- Insulin signaling pathway
- Metabolic pathways
- Starch and sucrose metabolism
- Streptomycin biosynthesis
- Type II diabetes mellitus