

Cali-Bio California Bioscience

# **Product Datasheet**

Product Name	Hexokinase-1 Human Recombinant
Cata No	CB500832
Source	Escherichia Coli.
Synonyms	Hexokinase-1, EC 2.7.1.1, Hexokinase type I, HK I, Brain form hexokinase, HK1-ta,
	HK1-tb, HXK1, HK1.

## Description

Hexokinases phosphorylate glucose to produce glucose-6-phosphate, thus committing glucose to the glycolytic pathway. Hexokinase1 encodes a ubiquitous form of hexokinase which localizes to the outer membrane of mitochondria. Mutations in this gene have been associated with hemolytic anemia due to hexokinase deficiency. Alternative splicing of HXK1 results in five transcript variants which encode different isoforms, some of which are tissue-specific. Each isoform has a distinct N-terminus; the remainder of the protein is identical among all the isoforms. A sixth transcript variant has been described, but due to the presence of several stop codons, it is not thought to encode a protein. HK1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain fused to His tag at the N-terminal encoding the sequence of

937 amino acids and having a molecular mass of 104.6 kDa.

#### Purity

Greater than 90.0% as determined by: (a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

### Storage

Store at  $4^{\circ}$  if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time. Please prevent freeze-thaw cycles.

### Formulation

The protein (1mg/ml) contains 20mM Tris pH8.0 and 10% glycerol.