



Product Datasheet

Product Name	Glucokinase/Hexokinase-4 Human Recombinant
Cata No	CB500842
Source	Escherichia Coli.
Synonyms	Glucokinase, EC 2.7.1.2, Hexokinase-4, Hexokinase type IV, HK IV, HK4, Hexokinase-D, GCK, GK, GLK, HHF3, HKIV, HXKP, MODY2.

Description

Hexokinases phosphorylate glucose to produce glucose-6-phosphate, thus committing glucose to the glycolytic pathway. Alternative splicing of Glucokinase results in three tissue-specific forms of glucokinase, one found in pancreatic islet beta cells and two found in liver. The protein localizes to the outer membrane of mitochondria. In contrast to other forms of hexokinase, HK4 is not inhibited by its product glucose-6-phosphate but remains active while glucose is abundant. Mutations in this gene have been associated with non-insulin dependent diabetes mellitus (NIDDM), maturity onset diabetes of the young, type 2 (MODY2) and persistent hyperinsulinemic hypoglycemia of infancy (PHHI). Glucokinase 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 485 amino acids and having a molecular mass of 54.3 kDa.

HK4 is purified by proprietary chromatographic techniques.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Storage

Store at 4°C 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 pH 8.0 and 10% glycerol.

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