

## Datasheet

### HK1 polyclonal antibody

**Catalog Number:** PAB4009

**Regulation Status:** For research use only (RUO)

**Product Description:** Rabbit polyclonal antibody raised against synthetic peptide of HK1.

**Immunogen:** A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human HK1.

**Host:** Rabbit

**Reactivity:** Human

**Applications:** ELISA, IHC-P, WB-Ce  
(See our web site product page for detailed applications information)

**Protocols:** See our web site at  
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Form:** Liquid

**Purification:** Protein G purification

**Recommend Usage:** ELISA (1:1000)  
Western Blot (1:100-500)  
Immunohistochemistry (1:50-100)  
The optimal working dilution should be determined by the end user.

**Storage Buffer:** In PBS (0.09% sodium azide)

**Storage Instruction:** Store at 4°C. For long term storage store at -20°C.  
Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 3098

**Gene Symbol:** HK1

**Gene Alias:** HK1-ta, HK1-tb, HK1-tc, HKI, HXK1

**Gene Summary:** Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This gene 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 this gene 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. [provided by RefSeq]

#### References:

1. HK Utrecht: missense mutation in the active site of human hexokinase associated with hexokinase deficiency and severe nonspherocytic hemolytic anemia. van Wijk R, Rijksen G, Huizinga EG, Nieuwenhuis HK, van Solinge WW. Blood. 2003 Jan 1;101(1):345-7. Epub 2002 Aug 8.
2. Gene expression and biological significance of hexokinase in erythroid cells. Murakami K, Kanno H, Tancabelic J, Fujii H. Acta Haematol. 2002;108(4):204-9.
3. Human HKR isozyme: organization of the hexokinase I gene, the erythroid-specific promoter, and transcription initiation site. Murakami K, Kanno H, Miwa S, Piomelli S. Mol Genet Metab. 1999 Jun;67(2):118-30.