

**Hexokinase I Rabbit mAb**  
Catalog # AP75535**Specification****Hexokinase I Rabbit mAb - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">P19367</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	102486

**Hexokinase I Rabbit mAb - Additional Information**

Gene ID 3098

**Other Names**

HK1

**Dilution**

WB~~1/500-1/1000

IHC~~1/50-1/100

IF~~1/50-1/200

**Format**

Liquid

**Hexokinase I Rabbit mAb - Protein Information**Name HK1 ([HGNC:4922](#))**Function**

Catalyzes the phosphorylation of various hexoses, such as D- glucose, D-glucosamine, D-fructose, D-mannose and 2-deoxy-D-glucose, to hexose 6-phosphate (D-glucose 6-phosphate, D-glucosamine 6-phosphate, D-fructose 6-phosphate, D-mannose 6-phosphate and 2-deoxy-D-glucose 6- phosphate, respectively) (PubMed:<a href="http://www.uniprot.org/citations/1637300" target="\_blank">1637300</a>, PubMed:<a href="http://www.uniprot.org/citations/25316723" target="\_blank">25316723</a>, PubMed:<a href="http://www.uniprot.org/citations/27374331" target="\_blank">27374331</a>). Does not phosphorylate N-acetyl-D-glucosamine (PubMed:<a href="http://www.uniprot.org/citations/27374331" target="\_blank">27374331</a>). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate (By similarity). Involved in innate immunity and inflammation by acting as a pattern recognition receptor for bacterial peptidoglycan (PubMed:<a href="http://www.uniprot.org/citations/27374331" target="\_blank">27374331</a>). When released in the cytosol, N-acetyl-D-glucosamine component of bacterial peptidoglycan inhibits the hexokinase activity of HK1 and causes its dissociation from mitochondrial outer membrane, thereby activating the NLRP3 inflammasome (PubMed:<a href="http://www.uniprot.org/citations/27374331" target="\_blank">27374331</a>).

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#### Cellular Location

Mitochondrion outer membrane; Peripheral membrane protein. Cytoplasm, cytosol. Note=The mitochondrial-binding peptide (MBP) region promotes association with the mitochondrial outer membrane (Probable). Dissociates from the mitochondrial outer membrane following inhibition by N-acetyl-D-glucosamine, leading to relocation to the cytosol (PubMed:27374331).

#### Tissue Location

Isoform 2: Erythrocyte specific (Ref.6). Isoform 3: Testis-specific (PubMed:10978502). Isoform 4: Testis-specific (PubMed:10978502). {ECO:0000269|PubMed:10978502, ECO:0000269|Ref.6}

### Hexokinase I Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Hexokinase I Rabbit mAb - Images



