

**KD-Validated Anti-Hexokinase 1 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI2361****Specification****KD-Validated Anti-Hexokinase 1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">P19367</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 102 kDa, observed, 102 kDa
KDa	
Gene Name	HK1
Aliases	Brain Form Hexokinase; Hexokinase Type I; Hexokinase-1; Hexokinase-A; EC 2.7.1.1; Neuropathy, Hereditary Motor And Sensory, Russe Type; Glycolytic Enzyme; Hexokinase IR; Hexokinase; EC 2.7.1; NEDVIBA; HK1-Ta; HK1-Tb; HK1-Tc; HMSN1; HXK1; NMSR; RP79; HK I; HKD; HKI; HK
Immunogen	A synthesized peptide derived from human Hexokinase 1

**KD-Validated Anti-Hexokinase 1 Rabbit Monoclonal Antibody - Additional Information****Gene ID** 3098**Other Names**

Hexokinase-1, 2.7.1.1, Brain form hexokinase, Hexokinase type I, HK I, Hexokinase-A, HK1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=4922" target="\_blank">HGNC:4922</a>)

**KD-Validated Anti-Hexokinase 1 Rabbit Monoclonal Antibody - 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>).

#### 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

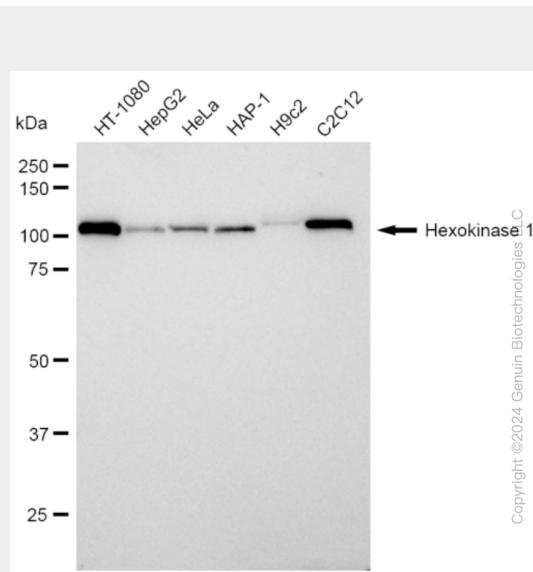
Isoform 2: Erythrocyte specific (Ref.6). Isoform 3: Testis-specific (PubMed:10978502). Isoform 4: Testis-specific (PubMed:10978502). {ECO:0000269|PubMed:10978502, ECO:0000269|Ref.6}

### KD-Validated Anti-Hexokinase 1 Rabbit Monoclonal Antibody - Protocols

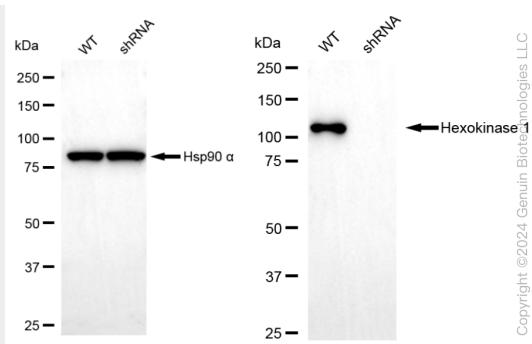
Provided below are standard protocols that you may find useful for product applications.

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

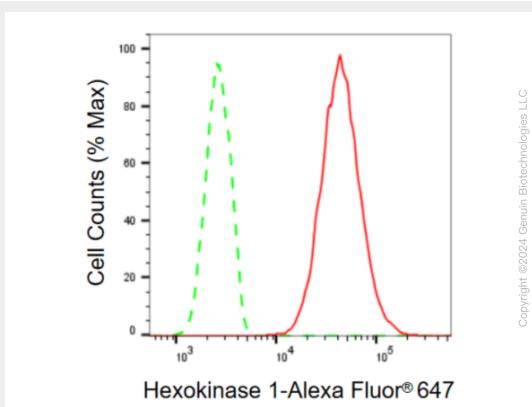
### KD-Validated Anti-Hexokinase 1 Rabbit Monoclonal Antibody - Images



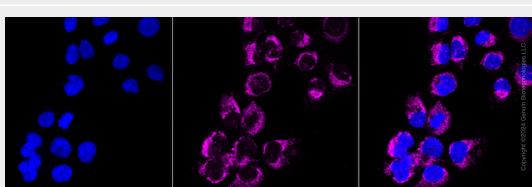
Western blotting analysis using anti-Hexokinase 1 antibody (Cat#AGI2361). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Hexokinase 1 antibody (Cat#AGI2361, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody respectively.



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