

Anti-HK1 / Hexokinase 1 Antibody (C-Terminus)
Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18244**Specification**

Anti-HK1 / Hexokinase 1 Antibody (C-Terminus) - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P19367
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	102486

Anti-HK1 / Hexokinase 1 Antibody (C-Terminus) - Additional Information**Gene ID 3098**Alias Symbol **HK1****Other Names**

HK1, Brain form hexokinase, Hexokinase 1, Hexokinase type I, HK I, HK1-tb, HK1-tc, HKI, Hexokinase type 1, HK1-ta, HXK1, Glycolytic enzyme, Hexokinase-1, Type 1 hexokinase, Type i hexokinase

Target/Specificity

Hexokinase 1 antibody is human, mouse and rat reactive. Multiple isoforms of Hexokinase 1 are known to exist.

Reconstitution & Storage

Immunoaffinity purified

Precautions

Anti-HK1 / Hexokinase 1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-HK1 / Hexokinase 1 Antibody (C-Terminus) - 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:1637300, PubMed:25316723, PubMed:27374331). Does not phosphorylate N-acetyl-D-glucosamine (PubMed:27374331). 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:27374331). 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:27374331).

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}

Anti-HK1 / Hexokinase 1 Antibody (C-Terminus) - 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](#)

Anti-HK1 / Hexokinase 1 Antibody (C-Terminus) - Images