



# Hexokinase 1 mouse mAb

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|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>         | BYab-14213                                                                                                                                                                                                                                                                                                                                                          |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Reactivity</b>         | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applications</b>       | WB                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Name</b>          | hk1                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Protein Name</b>       |                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>          | Purified recombinant human Hexokinase 1 protein fragments expressed in E.coli                                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | This antibody detects endogenous levels of Hexokinase 1 and does not cross-react with Hexokinase 2 and other proteins.                                                                                                                                                                                                                                              |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                             |
| <b>Source</b>             | Monoclonal, Mouse                                                                                                                                                                                                                                                                                                                                                   |
| <b>Purification</b>       | The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                  |
| <b>Dilution</b>           | wb 1:1000                                                                                                                                                                                                                                                                                                                                                           |
| <b>Concentration</b>      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity</b>             | ≥90%                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage Stability</b>  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>           | BB404130; Brain form hexokinase; dea; EC 2.7.1.1; Glycolytic enzyme; HEXOKIN; Hexokinase PI; Hexokinase type I; Hexokinase, tumor isozyme; Hexokinase-1; Hexokinase-A; HK I; HK1; HK1 tb; Hk1-s; HK1-ta; HK1-tb; HK1-tc; HKD; HKI; HMSNR; HXK1; HXK1_HUMAN; mHk1-s.                                                                                                 |
| <b>Observed Band</b>      | 102kD                                                                                                                                                                                                                                                                                                                                                               |
| <b>Cell Pathway</b>       | Mitochondrion outer membrane ; Peripheral membrane protein . Cytoplasm, cytosol . 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). . |
| <b>Tissue Specificity</b> | Isoform 2: Erythrocyte specific (Ref.6). Isoform 3: Testis-specific (PubMed:10978502). Isoform 4: Testis-specific (PubMed:10978502).                                                                                                                                                                                                                                |
| <b>Function</b>           | catalytic activity:ATP + D-hexose = ADP + D-hexose 6-phosphate.,disease:Defects in HK1 are the cause of hexokinase deficiency [MIM:235700]. Hexokinase deficiency is a rare autosomal recessive disease with nonspherocytic hemolytic anemia as the predominant clinical feature.,domain:The                                                                        |

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N- and C-terminal halves of this hexokinase show extensive sequence similarity to each other. The catalytic activity is associated with the C-terminus while regulatory function is associated with the N-terminus.,enzyme regulation:Hexokinase is an allosteric enzyme inhibited by its product Glc-6-P.,miscellaneous:In vertebrates there are four major glucose-phosphorylating isoenzymes, designated hexokinase I, II, III and IV (glucokinase).,online information:Hexokinase entry,pathway:Carbohydrate metabolism; hexose metabolism.,similarity:Belongs to the hexokinase family.,subcellular location:Its hydrophobic N-ter

## Background

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 several transcript variants which encode different isoforms, some of which are tissue-specific. [provided by RefSeq, Apr 2016],

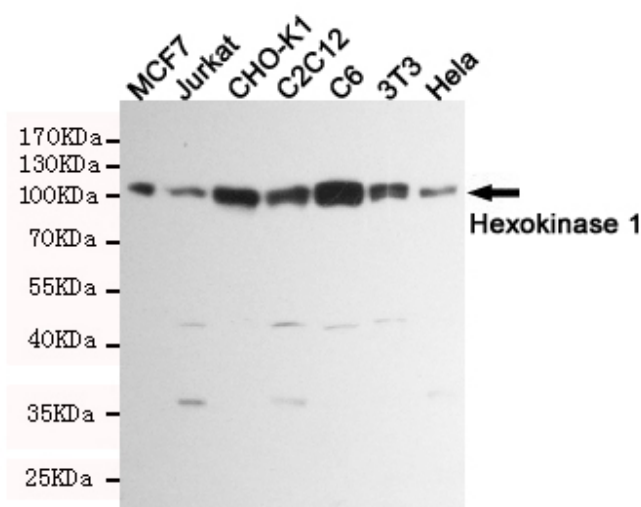
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western blot detection of Hexokinase 1 in MCF7, Jurkat, CHO-K1, C2C12, C6, 3T3 and HeLa cell lysates using Hexokinase 1 mouse mAb (1:1000 diluted). Predicted band size:102KDa. Observed band size:102KDa.