

## HK1 Ab

| Cat.#: BF0126<br>Size: 50ul,100ul,200ul | Concn.: 1mg/ml<br>Source: Mouse   | Mol.Wt.: 102kDa<br>Clonality: Monoclonal |
|---|---|--|
| Application:                            | ELISA 1/10000, WB 1/500 - 1/2000, IHC 1/200 - 1/1000, ICC<br>1/200 - 1/1000   |  |
| Reactivity:                             | Human,Mouse,Rat   |  |
| Purification:                           | Affinity-chromatography.  |  |
| Specificity:                            | HK1 Ab detects endogenous levels of total HK1.  |  |
| lmmunogen:                              | Purified recombinant fragment of human HK1 expressed in E. Coli.  |  |
| Uniprot:                                | P19367  |  |
| Description:                            | Hexokinases phosphorylate glucose to produce<br>glucose-6-phosphate, thus committing glucose to the<br>glycolytic pathway. This gene encodes a ubiquitous form of<br>hexokinase which localizes to the outer membrane of<br>mitochondria. Mutations in this gene have been associated<br>with hemolytic anemia due to hexokinase deficiency.<br>Alternative splicing of this gene results in five transcript<br>variants which encode different isoforms, some of which are<br>tissue-specific. Each isoform has a distinct N-terminus; the<br>remainder of the protein is identical among all the isoforms.<br>A sixth transcript variant has been described, but due to the<br>presence of several stop codons, it is not thought to encode<br>a protein. |  |
| Subcellular Location:                   | Mitochondrion outer membrane<br>sequence may be involved in m   |  |
| Tissue Specificity:                     | Isoform 2 is erythrocyte specific. Isoform 3 and isoform 4 are testis-specific.   |  |
| Similarity:                             | The N- and C-terminal halves of this hexokinase show<br>extensive sequence similarity to each other. The catalytic<br>activity is associated with the C-terminus while regulatory<br>function is associated with the N-terminus. Each domain can<br>bind a single glucose and Gluc-6-P molecule.Belongs to the<br>hexokinase family.  |  |
| Storage Condition and<br>Buffer:        | Mouse IgG1 in phosphate buffe<br>Ca2+), pH 7.4, 150mM NaCl, 0.<br>glycerol.Store at -20 °C.Stable t<br>receipt.   | 02% sodium azide and 50%                 |



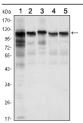


Figure 1: Western blot analysis using HK1 mouse mAb against Jurkat (1), Hela (2), HepG2 (3), MCF-7 (4) and PC-12 (5) cell lysate.

<code>IMPORTANT:</code> For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

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