For Research Use Only

Hexokinase 1 Monoclonal antibody

Catalog Number: 68419-1-Ig



Basic Information

Catalog Number: GenBank Accession Number:

68419-1-lg BC008730 GeneID (NCBI): Size: 1000 µg/ml 3098 UNIPROT ID: Source: Mouse P19367

Full Name: Isotype: IgG2a hexokinase 1

Calculated MW: Immunogen Catalog Number: AG8015 102 kDa

Observed MW:

100 kDa

Purification Method:

Protein A purification

CloneNo.: 2B4F9

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:500-1:2000

Applications

Tested Applications: IHC, IP, WB, ELISA Species Specificity: Human, mouse, rat, pig

Note-IHC: suggested antigen retrieval with retrieval may be performed with citrate buffer pH 6.0

TE buffer pH 9.0; (*) Alternatively, antigen

WB: HeLa cells, HT-1080 cells, U-87 MG cells, SK-BR-3 cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells, 4T1 cells, pig brain tissue

IP: HeLa cells.

IHC: mouse brain tissue,

Background Information

The hexokinases (HKs) catalyze the first obligatory step in glucose metabolism to generate glucose-6-phosphate. This not only furthers glucose entry by maintaining the concentration gradient for facilitated glucose influx but also $provides \ the \ first intermediate \ for \ essentially \ all \ major \ pathways \ using \ glucose. \ There \ are \ four \ conventional \ HK$ isoforms, HK1/2/3/4, encoded by four different genes. Most adult tissues express only HK1. Muscle and adipose tissue use HK2 for glycolysis, liver, and pancreatic beta cells express HK4 (also called glucokinase) and do not express HK1 or HK2. (PMID: 31434645, PMID: 31848318)

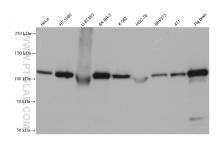
Storage

Store at -20°C. Stable for one year after shipment. Storage Buffer:

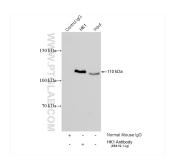
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68419-1-1g (HK1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



IP result of anti-Hexokinase 1 (IP:68419-1-Ig, 4ug; Detection:68419-1-Ig 1:2000) with HeLa cells lysate 1560 ug.



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 68419-1-Ig (Hexokinase 1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).