Data Sheet (Cat.No.TMAB-00868)

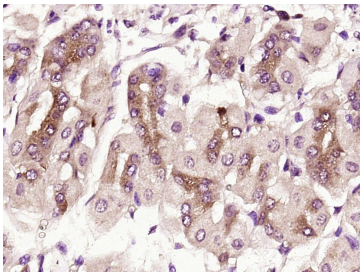
Anti-HK2 Polyclonal Antibody

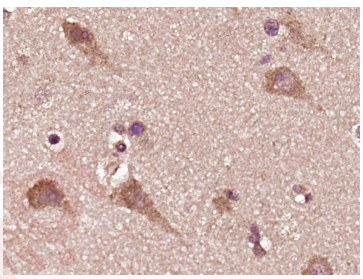
Product Details

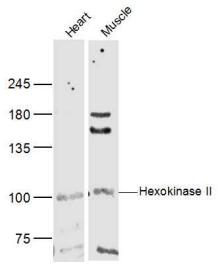
Ig Type:	IgG
Reactivity:	Human,Mouse (predicted:Rat,Dog,Pig,Cow,Rabbit,Sheep)
Molecular Weight:	Theoretical: 102 kDa. Actual: 102 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Paraformaldehyde-fixed, paraffin embedded (Mouse stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Hexokinase 2) Polyclonal Antibody, Unconjugated (TMAB-00868) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructionsand DAB staining. 2. Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Hexokinase 2) Polyclonal Antibody, Unconjugated (TMAB-00868) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructionsand DAB staining. 3. Sample: Heart (Mouse) Lysate at 40 µg Muscle (Mouse) Lysate at 40 µg Primary: Anti-Hexokinase II (TMAB-00868) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 102 kDa Observed band size: 102 kDa







Application: IF,IHC-Fr,IHC-P,WB

Recommended: IF=1:100-500; IHC-Fr=1:100-500; IHC-P=1:100-500; WB=1:500-2000

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: KLH conjugated synthetic peptide: human Hexokinase II/HxK2

Antigen Species: Human

Gene ID: 3099

Uniprot ID: P52789

Synonyms: HXK2;HKII

Biology Area: Metabolism of carbohydrates,Cardiac metabolism,Carbohydrate metabolism,Energy Metabolism,Energy Metabolism

Research Background

The hexokinases utilize Mg-ATP as a phosphoryl donor to catalyze the first step of intracellular glucose metabolism, the conversion of glucose to glucose-6-phosphate. Four hexokinase isoenzymes have been identified, including hexokinase I (HXK I), hexokinase II (HXK II), hexokinase III (HXK III) and hexokinase IV (HXK IV, also designated glucokinase or GCK). Hexokinases I-III each contain an N-terminal cluster of hydrophobic amino acids. Glucokinase lacks the N-terminal hydrophobic cluster. The hydrophobic cluster is thought to be necessary for membrane binding. This is substantiated by the finding that glucokinase has lower affinity for glucose than do the other hexokinases. HXK I has been shown to be expressed in brain, kidney and heart tissues as well as in hepatoma cell lines. HXK II is involved in the uptake and utilization of glucose by adipose and skeletal tissues. Of the hexokinases, HXK III has the highest affinity for glucose. Glucokinase is expressed in pancreatic beta cells where it functions as a glucose sensor, determining the “set point” for insulin secretion.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481