

**bs-9455R****[ Primary Antibody ]****Bioss**  
ANTIBODIES

www.bioss.com.cn

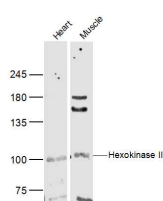
sales@bioss.com.cn

techsupport@bioss.com.cn

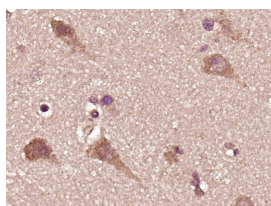
400-901-9800

**Hexokinase II Rabbit pAb****DATASHEET**

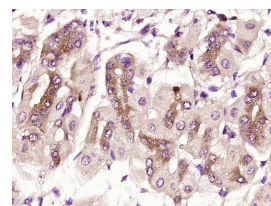
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      |                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Host:</b> Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Isotype:</b> IgG  | <b>Applications:</b> WB (1:500-2000)<br><b>IHC-P</b> (1:100-500)<br><b>IHC-F</b> (1:100-500)<br><b>IF</b> (1:100-500)<br><br><b>Reactivity:</b> Human, Mouse<br>(predicted: Rat, Rabbit, Pig, Sheep, Cow, Dog)<br><br><b>Predicted MW.:</b> 102 kDa<br><br><b>Subcellular Location:</b> Cell membrane ,Cytoplasm |
| <b>Clonality:</b> Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                                                                                                                                                                                                                                                                                                                  |
| <b>GeneID:</b> 3099                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>SWISS:</b> P52789 |                                                                                                                                                                                                                                                                                                                  |
| <b>Target:</b> Hexokinase II                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen:</b> KLH conjugated synthetic peptide derived from human Hexokinase II/HxK2: 101-200/917.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                                                                                                                                                                                                                                                                                                                  |
| <b>Purification:</b> affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                                                                                                                                                                                                                                                                                                                  |
| <b>Concentration:</b> 1mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                                                                                                                                                                                                                                                                                                                  |
| <b>Storage:</b> 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.<br>Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                                                                                                                                                                                                                                                                                                                  |
| <b>Background:</b> 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. |                      |                                                                                                                                                                                                                                                                                                                  |

**VALIDATION IMAGES**

Sample: Heart (Mouse) Lysate at 40 ug Muscle (Mouse) Lysate at 40 ug  
Primary: Anti-Hexokinase II (bs-9455R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 102 kD  
Observed band size: 102 kD



Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Hexokinase 2) Polyclonal Antibody, Unconjugated (bs-9455R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Hexokinase 2) Polyclonal Antibody, Unconjugated (bs-9455R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

**SELECTED CITATIONS**

- **[IF=9.314]** Zhou et al. Melatonin protects cardiac microvasculature against ischemia/reperfusion injury via suppression

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

- of mitochondrial fission-VDAC1-HK2-mPTP-mitophagy axis. (2017) J.Pineal.Re. 63 WB,ICC ;Mouse. 28398674
- **[IF=5.8]** Xu Jianguo. et al. PDGF-BB accelerates TSCC via fibroblast lactates limiting miR-26a-5p and boosting mitophagy. CANCER CELL INT. 2024 Dec;24(1):1-18 IHC ;Human. 38169376
  - **[IF=2.886]** Yan Liu. et al. CircTTBK2 Contributes to the Progression of Glioma Through Regulating miR-145-5p/CPEB4 Axis. Cancer Manag Res. 2020; 12: 8183–8195 WB ;Human. 32982415
  - **[IF=2.4]** Zhao Xuan. et al. CircSFMBT2 Plays an Oncogenic Role in Lung Adenocarcinoma Depending on the miR-1305/SALL4 Axis. BIOCHEM GENET. 2023 Dec;;1-19 WB ;Human. 38127171