

HK2 recombinant protein

HK2 Protein, Human, Recombinant (His Tag), HPLC-verified

CATALOG #
AAA259201

HOST
Baculovirus-Insect Cells

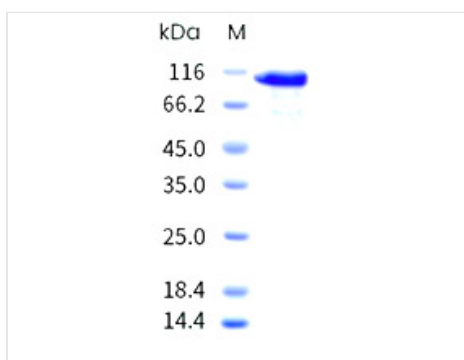
PRODUCT SYNONYMS

HK2; HK2 Protein; Human; Recombinant (His Tag); HPLC-verified; HKII Protein; HXK2 Protein; HK2 recombinant protein

PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells
Purity/Purification	≥95% as determined by SDS-PAGE. ≥90% as determined by SEC-HPLC.
Form/Format	Lyophilized from sterile 20 mM PB, 300 mM NaCl, 10% Glycerol, pH 7, 5% Trehalose, 5% Mannitol, 0.01% Tween-80.
Species	Human
Predicted N Terminal	Met 1
Endotoxin	<1.0 EU per ug protein as determined by the LAL method.
Protein Construction	A DNA sequence encoding the Human HK2 (P52789)(Met1-Arg917) was expressed with a polyhistidine tag at the C-terminus.
Reconstitution	Reconstituted with sterile deionized water to 0.25 mg/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for HK2 recombinant protein	Hexokinase 2 (HK2), a rate-limiting enzyme in the first step of the glycolysis pathway, expresses at a high level in cancer cells compared with normal cells. HK2 provides a new target for cancer therapy due to its pivotal role in tumor tumourigenic and metastatic processes. The glycolytic enzyme hexokinase 2 (HK2) is crucial for the Warburg effect in human glioma, the most common malignant brain tumor. Although absent in most adult tissues, hexokinase 2 (HK2) is expressed in a majority of tumors and contributes to increased glucose consumption and to in vivo tumor 18F-FDG PET signaling. Hexokinase 2 (HK2) is a rate-determining enzyme in aerobic glycolysis, a process upregulated in tumor cells. HK2 expression is controlled by various transcription factors and epigenetic alterations and is heterogeneous in hepatocellular carcinomas (HCCs), though the cause of this heterogeneity is not known.
References	Xu S, et al. (2018) Hexokinase 2 is targetable for hk1 negative, hk2 positive tumors from a wide variety of tissues of origin. J Nucl Med Liu H, et al. (2017) Hexokinase 2 (hk2), the tumor promoter in glioma, is downregulated by mir-218/bmi1 pathway. PLoS One 12 (12): e0189353. Lee HG, et al. (2016) Regulation of hk2 expression through alterations in cpG methylation of the hk2 promoter during progression of hepatocellular carcinoma. Oncotarget 7 (27): 41798-41810. Bao F, et al. (2018) New natural inhibitors of hexokinase 2 (hk2): Steroids from ganoderma sinense. Fitoterapia 125 123-129.

NCBI AND UNIPROT INFORMATION

NCBI GI #	39963174
NCBI GeneID	3099
UniProt Accession #	P52789; Q8WU87; Q9UN82; D6W5J2
Molecular Weight	Predicted: 103.84 kDa
NCBI Official Full Name	Hexokinase 2
NCBI Official Synonym Full Names	hexokinase 2
NCBI Official Symbol	HK2
NCBI Official Synonym Symbols	HKII; HXK2
NCBI Protein Information	hexokinase-2; HK II; hexokinase type II; hexokinase-2, muscle; muscle form hexokinase
UniProt Protein Name	Hexokinase-2
UniProt Gene Name	HK2
UniProt Synonym Gene Names	HK II
UniProt Entry Name	HXK2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hk2-recombinant-protein-baculovirus-insect-cells/259201>