Recombinant Human HK2 Protein(Trx Tag)

Catalog Number: PDEH100629

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

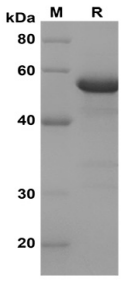
Description

Species	Human
Source	E.coli-derived Human HK2 protein His568-Arg917, with an N-terminal Trx
Calculated MW	58.3 kDa
Observed MW	38 kDa
Accession	P52789
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human HK2 proteins, 2μg/lane of Recombinant Human HK2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 38 KD

Background

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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.