PFKFB4, His-Tag Recombinant

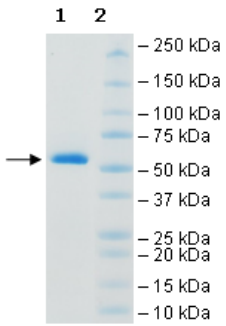
Catalog: 71199
Lot: 191028-2

Product Information

Description:	Recombinant human PFKFB4 (6- phosphofructo-2-kinase/fructose-2,6- bisphosphatase 4), full-length, encompassing amino acids 2-469(end). This construct contains an N-terminal His-tag (6xHis). The recombinant protein was affinity purified.
Background:	PFKFB4 (6- phosphofructo-2-kinase/fructose-2,6- bisphosphatase 4) is a bifunctional protein that regulates glycolysis by controlling the concentration of fructose-2,6-bisphosphate (F2,6BP). It is often overexpressed in cancers, where it supports cell survival, proliferation, and resistance to therapies, particularly under hypoxic conditions. PFKFB4's functions include promoting the Warburg effect (glycolysis in the presence of oxygen), maintaining antioxidant synthesis, and supporting cell migration and stemness. Because of its critical role in cancer, PFKFB4 is considered a potential therapeutic target.
Species:	Human
Construct:	PFKB4 (His-2-469(end))
Concentration:	0.46 mg/ml
Expression System:	*E. coli*
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	40 mM Tris-HCl pH 8.0, 110 mM NaCl, 2.2 mM KCl, 0.04% Tween-20, 20% glycerol, 3 mM DTT, and 200 mM imidazole
MW:	55 kDa
Genbank Accession:	NM_004567
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Assay Conditions:	Assay was done in reaction buffer containing 50 mM Tris-HCl, pH 7.5, 10 mM $MgCl_2$, 10 mM KH_2PO_4 and 2 mM DTT using 1 mM β-D-Fructose-6-Phosphate and 20 µM ATP. Reaction was done at 30°C for 30 minutes. Amount of ATP transferred was calculated using Kinase-Glo® reagent (Promega).
Specific Activity:	16 pmol/min/µg
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



PFKB4 Activity