

Recombinant Human PFKFB3 (N-6His)

Catalog Number: PKSH033971

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

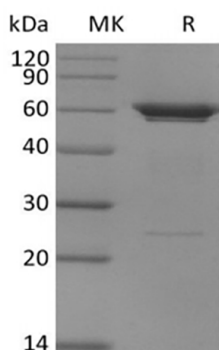
Description

Species	Human
Source	E.coli-derived Human PFKFB3 protein Met1-His520, with an N-terminal His
Calculated MW	61.8 kDa
Observed MW	57-62 kDa
Accession	Q16875
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM PB, 50mM KCl, 5mM DTT, 0.1mM EDTA, 50% glycerol, 0.1% TritonX-100, pH 6.0.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Fructose-2,6-bisphosphatase 3, also known as 6-phosphofructo-2-kinase or PFK2 or PFKFB3, involved in both the synthesis and degradation of fructose-2,6-bisphosphate, a regulatory molecule that controls the activity of the enzymes phosphofructokinase 1 (PFK-1) and fructose 1,6-bisphosphatase (FBPase-1) to regulate glycolysis and gluconeogenesis. Highly phosphorylated PFKFB3 protein was found in human tumor cells, vascular endothelial cells, and smooth muscle cells. Because of its proto-oncogenic character, the PFK-2/FBPase-2 of the PFKFB3 gene is assumed to play a critical role in tumorigenesis. PFKFB3 also plays a crucial role in the progression of cancerous cells by enabling their glycolytic pathways even under severe hypoxic conditions, which makes it a potential target for cancer therapy.