Active Recombinant Human PFKFB3 protein, His-tagged

Cat. No. PFKFB3-24H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human PFKFB3(Pro2-His520) fused with N-terminal Met and 6-His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	2-520 a.a.
Description	6-Phosphofructo-2-kinase/fructose-2,6-bisphosphatase 3 (PFKFB3) is 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. PFKFB3 has a 6-phosphofructo-2-kinase activity that catalyzes the synthesis of fructose-2,6-bisphosphate, and a fructose-2,6-biphosphatase activity that catalyzes the degradation of fructose-2,6-bisphosphate. Recently, it is reported to be involved in vessel sprouting of endothelial cells (ECs). ECs rely on glycolysis rather than on oxidative phosphorylation for ATP production and that loss of the glycolytic activator PFKFB3 in ECs impairs vessel formation. 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. The kinase activity of recombinant human PFKFB3 was assayed using a phosphatase-coupled method.
Predicted N Terminal	Met

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Form	Supplied as a 0.2 μm filtered solution in Tris, NaCl and DTT.
Bio-activity	Measured by its ability to phosphorylate fructose-6-phosphate. The specific activity is >70 pmol/min/μg.
Molecular Mass	Predicted Molecular Mass: 60 kDa; SDS-PAGE: 57 kDa, reducing conditions.
Endotoxin	<1.0 EU per 1 μg of the protein by the LAL method.
Purity	>85%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain at 5 μg per lane
Storage	Avoid repeated freeze-thaw cycles. 6 months from date of receipt, -70 centigrade as supplied. 3 months, -70 centigrade under sterile conditions after opening.

GENE INFORMATION

Gene Name	PFKFB3 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3 [Homo sapiens]
Official Symbol	PFKFB3
Synonyms	PFKFB3; 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3; 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 3; iPFK-2; PFK/FBPase 3; 6PF-2-K/Fru-2,6-P2ase 3; renal carcinoma antigen NY-REN-56; 6PF-2-K/Fru-2,6-P2ase brain/placenta-type isozyme; 6-phosphofructo-2-kinase/ fructose-2,6-bisphosphatase; 6-phosphofructo-2-kinase/fructose-2, 6-bisphosphatase; fructose-6-phosphate,2-kinase/fructose-2, 6-bisphosphatase; inducible 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase; PFK2; IPFK2; FLJ37326;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	5209
mRNA Refseq	NM_001145443
Protein Refseq	NP_001138915
MIM	605319
UniProt ID	Q16875

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA