Product Name: KD-Validated PFKFB3 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01168
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 59.6kDa

Antigen Information

Gene Name	PFKFB3
Alternative Names	PFKFB3; 6-Phosphofructo-2-Kinase/Fructose-2,6-Biphosphatase 3; 6-Phosphofructo-2-Kinase/Fructose-2,6-Bisphosphatase 3; 6PF-2-K/Fru-2,6-P2ase Brain/Placenta-Type Isozyme 3; Renal Carcinoma Antigen NY-REN-56; 6PF-2-K/Fru-2,6-P2ase 3; PFK/FBPase 3; IPFK-2; Inducible 6-Phosphofructo-2-Kinase/Fructose-2,6-Bisphosphatase; Fructose-6-Phosphate,2-Kinase/Fructose-2, 6-Bisphosphatase; 6-Phosphofructo-2-Kinase/ Fructose-2,6-Bisphosphatase; IPFK2; PFK2
Gene ID	5209.0
SwissProt ID	Q16875
Immunogen	A synthesized peptide derived from human PFKFB3

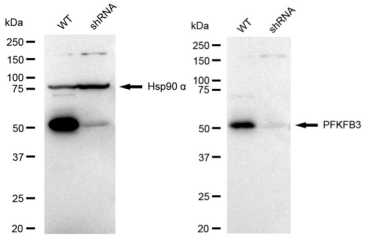
Background

The protein encoded by this gene belongs to a family of bifunctional proteins that are involved in both the synthesis and degradation of fructose-2,6-bisphosphate, a regulatory molecule that controls glycolysis in eukaryotes. The encoded protein has a 6-phosphofructo-2-kinase activity that catalyzes the synthesis of fructose-2,6-bisphosphate (F2,6BP), and a fructose-2,6-biphosphatase activity that catalyzes the degradation of F2,6BP. This protein is required for cell cycle progression and prevention of apoptosis. It functions as a regulator of cyclin-dependent kinase 1, linking glucose metabolism to cell proliferation and survival in tumor cells. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2016]

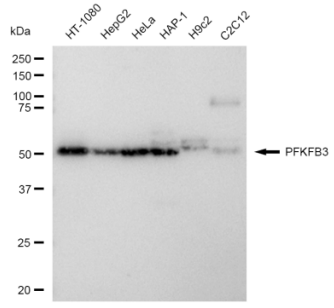
Research Area

Cardiovascular,Signal Transduction,Neuroscience,Cancer,Metabolism

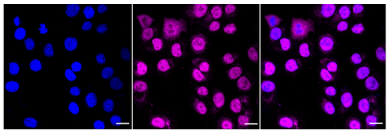
Image Data



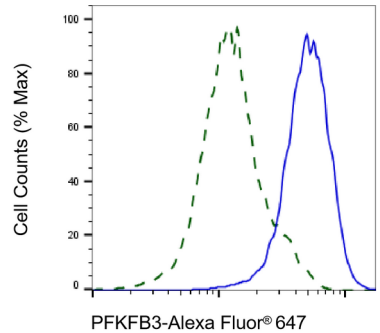
Western blotting analysis using PFKFB3 antibody (KVAb01168). PFKFB3 expression in wild type (WT) and PFKFB3 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with PFKFB3 antibody (KVAb01168, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



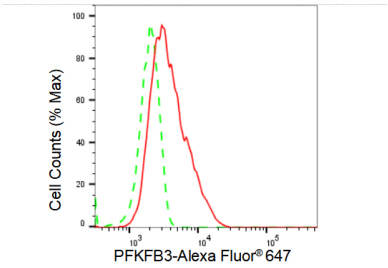
Western blotting analysis using PFKFB3 antibody (KVAb01168). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PFKFB3 antibody (KVAb01168, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with PFKFB3 antibody (KVAb01168, 1:1,000) . Nuclei were stained blue with DAPI; PFKFB3 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of PFKFB3 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HT-1080 cells were stained with PFKFB3 antibody (KVAb01168, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of PFKFB3 expression in HT-1080 cells using PFKFB3 antibody (KVAb01168, 1:2,000). Green, isotype control; red, PFKFB3.