

Rabbit PFKFB2 Polyclonal Antibody | anti-PFKFB2 antibody

Anti-PFKFB2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125765	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

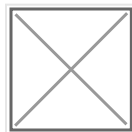
PRODUCT SYNONYMS

PFKFB2; Polyclonal Antibody; Anti-PFKFB2 Antibody; 6-phosphofructo-2-kinase/fructose-2; 6-bisphosphatase 2; 6PF-2-K/Fru-2; 6-P2ase 2; PFK/FBPase 2; 6-P2ase heart-type isozyme [Includes: 6-phosphofructo-2-kinase; EC 2. 7. 1. 105; Fructose-2; 6-bisphosphatase; EC 3. 1. 3. 46]; 6-biphosphatase 2; anti-PFKFB2 antibody

PRODUCT SPECIFICATIONS

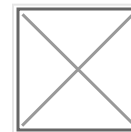
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for PFKFB2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-PFKFB2 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived human PFKFB2 recombinant protein (Position: A4-D505).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of CACO-2 cells using anti-PFKFB2 antibody (AAA125765). Overlay histogram showing CACO-2 cells stained with AAA125765 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PFKFB2 Antibody (AAA125765, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of A431 cells using anti-PFKFB2 antibody (AAA125765). Overlay histogram showing A431 cells stained with AAA125765 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PFKFB2 Antibody (AAA125765, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of PFKFB2 using anti- PFKFB2 antibody (AAA125765).PFKFB2 was detected in immunocytochemical section of HELA cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL rabbit anti- PFKFB2 Antibody (AAA125765) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of PFKFB2 using anti-PFKFB2 antibody (AAA125765).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.Lane 1: human K562 whole cell lysatesLane 2: human HepG2 whole cell lysatesLane 3: human Caco-2 whole cell lysatesLane 4: human Hela whole cell lysatesLane 5: human A431 whole cell lysatesLane 6: human PC-3 whole cell lysatesLane 7: rat heart tissue lysatesLane 8: rat PC-12 whole cell lysatesLane 9: mouse heart tissue lysatesLane 10: mouse RAW264. 7 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-PFKFB2 antigen affinity purified polyclonal antibody (Catalog # AAA125765) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PFKFB2 at approximately 58KD. The expected band size for PFKFB2 is at 58KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PFKFB2 antibody	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 2 is an enzyme that in humans is encoded by the PFKFB2 gene. The protein encoded by this gene is 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, and a fructose-2,6-bisphosphatase activity that catalyzes the degradation of fructose-2,6-bisphosphate. This protein regulates fructose-2,6-bisphosphate levels in the heart, while a related enzyme encoded by a different gene regulates fructose-2,6-bisphosphate levels in the liver and muscle. This enzyme functions as a homodimer. Two transcript variants encoding two different isoforms have been found for this gene.
References	1. Heine-Suner, D., Diaz-Guillen, M. A., de Villena, F. P. -M., Robledo, M., Benitez, J., Rodriguez de Cordoba, S. A high-resolution map of the regulator of the complement activation gene cluster on 1q32 that integrates new genes and markers. Immunogenetics 45: 422-427, 1997. 2. Heine-Suner, D., Diaz-Guillen, M. A., Lange, A. J., Rodriguez de Cordoba, S. Sequence and structure of the human 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase heart isoform gene (PFKFB2). Europ. J. Biochem. 254: 103-110, 1998. 3. Hilliker, C. E., Darville, M. I., Aly, M. S., Chikri, M., Szpirer, C., Marynen, P., Rousseau, G. G., Cassiman, J. -J. Human and rat chromosomal localization of two genes for 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase by analysis of somatic cell hybrids and in situ hybridization. Genomics 10: 867-873, 1991.

NCBI AND UNIPROT INFORMATION

NCBI GI #	64762445
NCBI GeneID	5208
NCBI Accession #	NP_001018063.1
NCBI GenBank Nucleotide #	NM_001018053.1
UniProt Accession #	O60825; O60824; Q5VVQ3; Q5VVQ4; Q9H3P1
Molecular Weight	58,477 Da
NCBI Official Full Name	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 2 isoform b
NCBI Official Synonym Full Names	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 2
NCBI Official Symbol	PFKFB2
NCBI Official Synonym Symbols	PFK-2/FBPase-2

NCBI Protein Information	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 2; PFK/FBPase 2; PFKFB, cardiac; 6PF-2-K/Fru-2,6-P2ase 2; 6PF-2-K/Fru-2,6-P2ASE heart-type isozyme; fructose-2,6-bisphosphatase, cardiac isozyme
UniProt Protein Name	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 2
UniProt Gene Name	PFKFB2
UniProt Synonym Gene Names	6PF-2-K/Fru-2,6-P2ase 2
UniProt Entry Name	F262_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pfkfb2-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/125765>