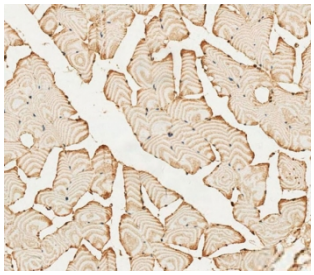
PFKFB4 Antibody / PFK/FBPase 4 (F55109)

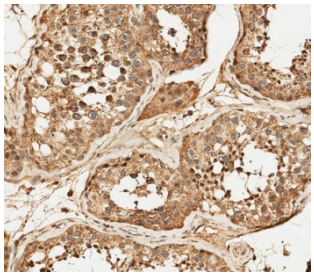
Catalog No.	Formulation	Size
F55109-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F55109-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

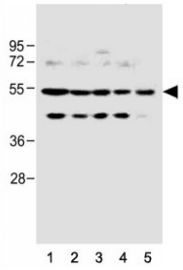
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q16877
Localization	Cytoplasm
Applications	Western Blot : 1:500-1:1000 Immunohistochemistry (FFPE) : 1:100-1:250
Limitations	This PFKFB4 antibody is available for research use only.



IHC staining of FFPE human skeletal muscle tissue with PFKFB4 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC staining of FFPE human testis tissue with PFKFB4 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Western blot testing of human 1) Raji, 2) MOLT4, 3) NCI-H1299, 4) HEK293 and 5) U-87 MG cell lysate with PFKFB4 antibody. Predicted molecular weight ~54 kDa.

Description

PFKFB4, also called 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4, is a key enzyme involved in the regulation of cellular metabolism. It acts as a regulator of the glycolysis process, which is the breakdown of glucose into energy. This enzyme is crucial for maintaining the balance between energy production and storage within the cell. Research has shown that dysregulation of PFKFB4 can have profound effects on cellular metabolism and ultimately, overall health. For example, overexpression of PFKFB4 has been linked to increased glycolysis and cancer cell proliferation, making it a potential target for cancer therapy. On the other hand, decreased levels of PFKFB4 have been associated with metabolic disorders such as diabetes. One particularly intriguing aspect of PFKFB4 is its dual function as both a kinase and a phosphatase. This unique feature allows it to not only stimulate glycolysis but also inhibit the breakdown of fructose-2,6-biphosphate, a key activator of glycolysis. This dual role gives PFKFB4 a central position in the complex regulatory network of cellular metabolism.

Application Notes

The stated application concentrations are suggested starting points. Titration of the PFKFB4 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 266-296 from the human protein was used as the immunogen for the PFKFB4 antibody.

Storage

Aliquot the PFKFB4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com