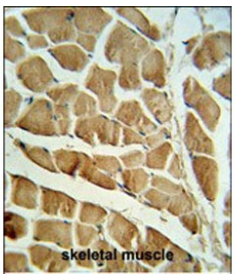
CAPN3 Antibody / Calpain 3 (F55132)

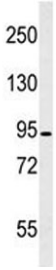
Catalog No.	Formulation	Size
F55132-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F55132-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

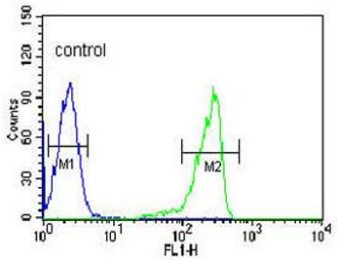
Availability	1-2 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
UniProt	P20807
Applications	Western Blot : 1:500-1:1000 Immunohistochemistry (FFPE) : 1:50-1:100 Flow Cytometry : 1:10-1:50 per million cells in 0.1ml
Limitations	This CAPN3 antibody is available for research use only.



IHC staining of FFPE human skeletal muscle tissue with CAPN3 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Western blot testing of human HL60 cell lysate with CAPN3 antibody. Predicted molecular weight ~94 kDa.



Flow cytometry testing of fixed and permeabilized human HL60 cells with CAPN3 antibody; Blue=isotype control, Green= CAPN3 antibody.

Description

Calpain 3 is a member of the calpain family of proteases, which are enzymes that break down proteins in the body. Unlike other calpain enzymes that are present in various tissues, Calpain 3 is predominantly found in skeletal muscle. Its main function is to regulate the turnover of muscle proteins, ensuring that they are properly maintained and repaired. One of the key roles of Calpain 3 is to maintain the structural integrity of muscle fibers. It is involved in the breakdown of damaged or misfolded proteins, preventing them from accumulating and causing muscle dysfunction. Additionally, Calpain 3 plays a vital role in muscle regeneration, helping to repair damaged fibers and promote muscle growth. Deficiencies in Calpain 3 have been linked to various muscle disorders, including limb-girdle muscular dystrophy type 2A. In individuals with this condition, mutations in the CAPN3 gene lead to impaired muscle function and weakness.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the CAPN3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 603-632 from the human protein was used as the immunogen for this CAPN3 antibody.

Storage

Store at 4oC for up to one month. For long term, aliquot the CAPN3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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