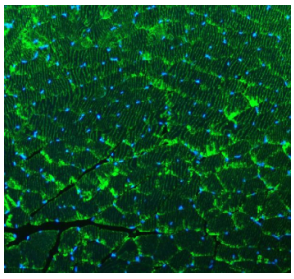
ACTN3 Antibody (R32494)

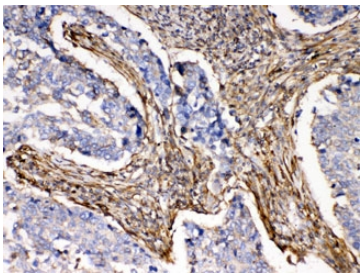
Catalog No.	Formulation	Size
R32494	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

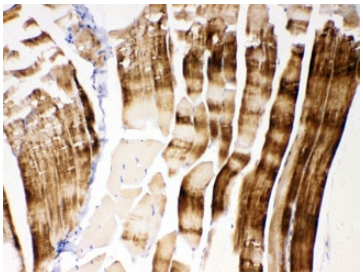
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q08043
Localization	Cytoplasmic, extracellular
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Flow cytometry: 1-3ug/million cells Immunofluorescence: 5ug/ml
Limitations	This ACTN3 antibody is available for research use only.



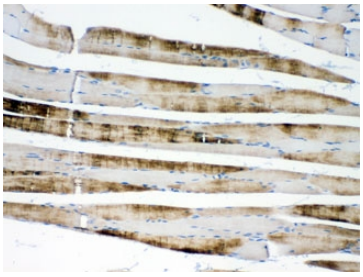
Immunofluorescent staining of FFPE mouse skeletal muscle tissue with ACTN3 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



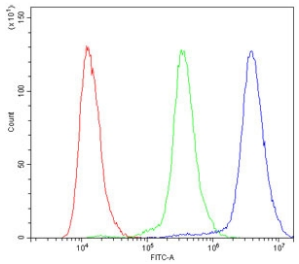
IHC testing of FFPE human lung cancer tissue with ACTN3 antibody at 1ug/ml. HIER: steam sections in pH6 citrate buffer for 20 min.



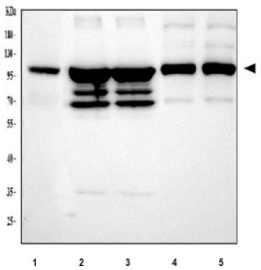
IHC testing of FFPE mouse skeletal muscle with ACTN3 antibody at 1ug/ml. HIER: steam sections in pH6 citrate buffer for 20 min.



IHC testing of FFPE rat skeletal muscle with ACTN3 antibody at 1ug/ml. HIER: steam sections in pH6 citrate buffer for 20 min.



Flow cytometry testing of human WISH cells with ACTN3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ACTN3 antibody.



Western blot testing of 1) human HT1080, 2) rat skeletal muscle, 3) rat skeletal muscle, 4) mouse skeletal muscle and 5) mouse skeletal muscle tissue lysate with ACTN3 antibody at 0.5ug/ml. Predicted molecular weight ~103 kDa.

Description

Alpha-actinin-3, also known as alpha-actinin skeletal muscle isoform 3 or F-actin cross-linking protein, is a protein that in humans is encoded by the ACTN3 gene. This gene encodes a member of the alpha-actin binding protein gene family. The encoded protein is primarily expressed in skeletal muscle and functions as a structural component of sarcomeric Z line. This protein is involved in crosslinking actin containing thin filaments. An allelic polymorphism in this gene results in both coding and non-coding variants; the reference genome represents the coding allele. The non-functional allele of this gene is associated with elite athlete status.

Application Notes

Differences in protocols and secondary/substrate sensitivity may require the ACTN3 antibody to be titrated for optimal performance.

Immunogen

Amino acids 574-617 (EADRERGAIMGIQGEIQKICQTYGLRPCSTNPYITLSPQDINTK) from the human protein were used as the immunogen for the ACTN3 antibody.

Storage

After reconstitution, the ACTN3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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