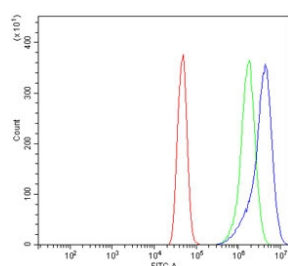


ACTN2 Antibody / Alpha Actinin 2 / Sarcomeric Alpha Actinin (RQ6542)

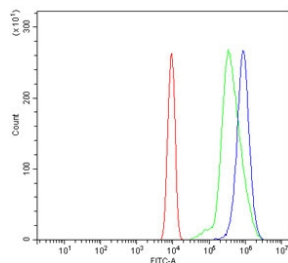
Catalog No.	Formulation	Size
RQ6542	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

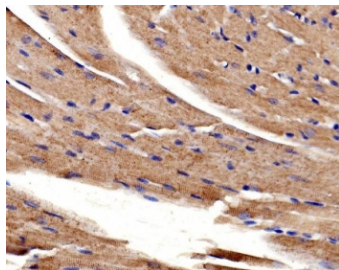
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P35609
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This ACTN2 antibody is available for research use only.



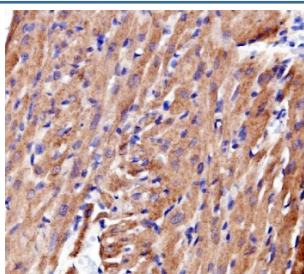
Flow cytometry testing of human A431 cells with ACTN2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ACTN2 antibody.



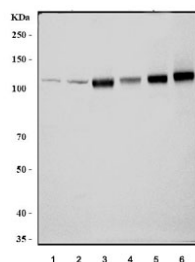
Flow cytometry testing of mouse ANA-1 cells with ACTN2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ACTN2 antibody.



IHC staining of FFPE mouse heart tissue with ACTN2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat heart tissue with ACTN2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HeLa, 2) human HepG2, 3) rat skeletal muscle, 4) rat heart, 5) mouse skeletal muscle and 6) mouse heart lysate with ACTN2 antibody. Predicted molecular weight ~103 kDa.

Description

Alpha-actinin 2 is a protein which in humans is encoded by the ACTN2 gene. Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. This gene encodes a muscle-specific, alpha actinin isoform that is expressed in both skeletal and cardiac muscles. Several transcript variants encoding different isoforms have been found for this gene.

Application Notes

Optimal dilution of the ACTN2 antibody should be determined by the researcher.

Immunogen

An E. coli-derived human protein (amino acids E567-E696) was used as the immunogen for the ACTN2 antibody.

Storage

After reconstitution, the ACTN2 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.