

**Actinin- $\alpha$ 2/3 rabbit pAb****Cat#: orb764469 (Manual)**

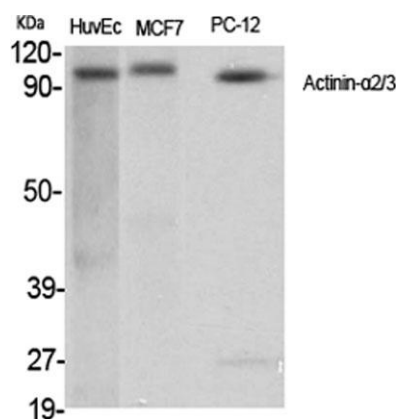
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	Actinin- $\alpha$ 2/3 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Actinin alpha-2/3. AA range:31-80
<b>Specificity</b>	Actinin- $\alpha$ 2/3 Polyclonal Antibody detects endogenous levels of Actinin- $\alpha$ 2/3 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Alpha-actinin-2/3
<b>Gene Name</b>	ACTN2/ACTN3
<b>Cellular localization</b>	Cytoplasm, myofibril, sarcomere, Z line . Colocalizes with MYOZ1 and FLNC at the Z-lines of skeletal muscle.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

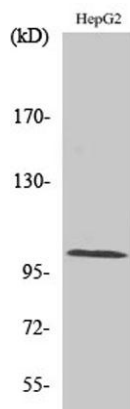
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	103kD
<b>Human Gene ID</b>	88/89
<b>Human Swiss-Prot Number</b>	P35609/Q08043
<b>Alternative Names</b>	ACTN2; Alpha-actinin-2; Alpha-actinin skeletal muscle isoform 2; F-actin cross-linking protein; ACTN3; Alpha-actinin-3; Alpha-actinin skeletal muscle isoform 3; F-actin cross-linking protein

### Background

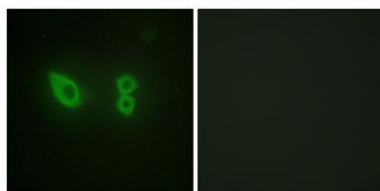
Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform 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. [provided by RefSeq, May 2013],



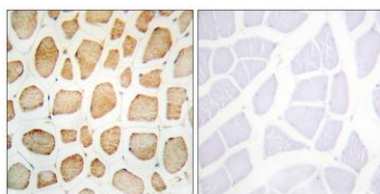
**Western Blot analysis of various cells using Actinin- $\alpha$ 2/3 Polyclonal Antibody**



Western Blot analysis of HepG2 cells using Actinin- $\alpha$ 2/3 Polyclonal Antibody



Immunofluorescence analysis of HeLa cells, using Actinin  $\alpha$ -2/3 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue, using Actinin  $\alpha$ -2/3 Antibody. The picture on the right is blocked with the synthesized peptide.