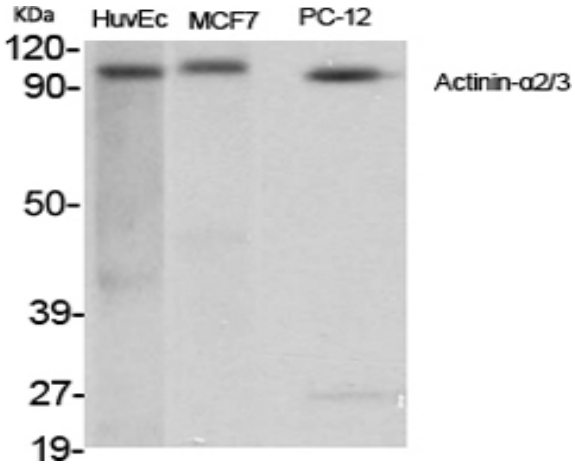
Best Tools for immunology Research

Actinin-α2/3 Polyclonal Antibody

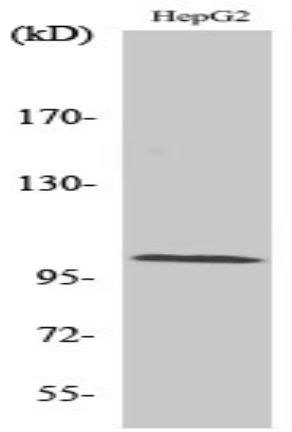
Catalog No :	YT0102
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Actinin-α2/3
Fields :	>>Arrhythmogenic right ventricular cardiomyopathy
Gene Name :	ACTN2/ACTN3
Protein Name :	Alpha-actinin-2/3
Human Gene Id :	88/89
Human Swiss Prot No :	P35609/Q08043
Mouse Gene Id :	11472/11474
Immunogen :	The antiserum was produced against synthesized peptide derived from human Actinin alpha-2/3. AA range:31-80
Specificity :	Actinin-α2/3 Polyclonal Antibody detects endogenous levels of Actinin-α2/3 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	103kD
Cell Pathway :	Focal adhesion;Adherens_Junction;Adherens_Junction;Leukocyte transendothelial migration;Regulates Actin and Cytoskeleton;Systemic lupus erythematosus;Arrhythmogenic right ventricular cardiomyopathy (A
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],
Function :	disease:Defects in ACTN2 are the cause of cardiomyopathy dilated type 1AA (CMD1AA) [MIM:612158]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.,function:F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein.,similarity:Belongs to the alpha-actinin family.,similarity:Contains 1 actin-binding domain.,similarity:Contains 2 CH (calponin-homology) domains.,similarity:Contains 2 EF-hand domains.,similarity:Contains 4 spectrin repeats.,subcellular location:Colocalizes with MYOZ1 and FLNC at the Z-lines of skeletal muscle.,subunit:Homodimer; antiparallel. Also forms heterodimers with ACTN3. Interacts with ADAM12, MYOZ1, MYOZ2 and MYOZ3. Interacts via its C-terminal r
Subcellular Location :	Cytoplasm, myofibril, sarcomere, Z line . Colocalizes with MYOZ1 and FLNC at the Z-lines of skeletal muscle.
Expression :	Expressed in both skeletal and cardiac muscle.
Sort :	1709
No4 :	1
Host :	Rabbit
Modifications :	Unmodified

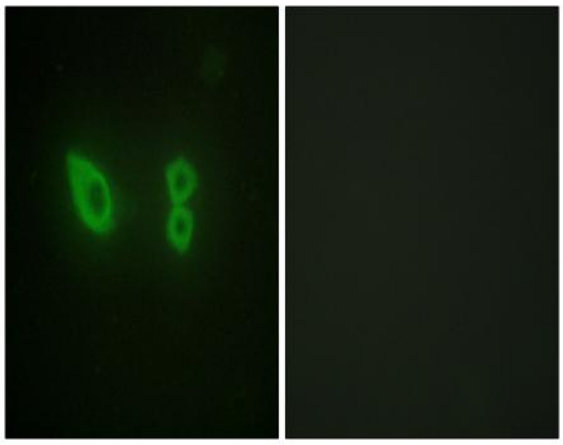
Products Images



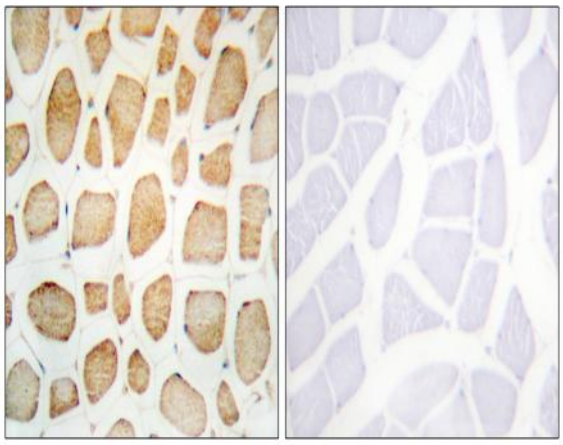
Western Blot analysis of various cells using Actinin-α2/3 Polyclonal Antibody



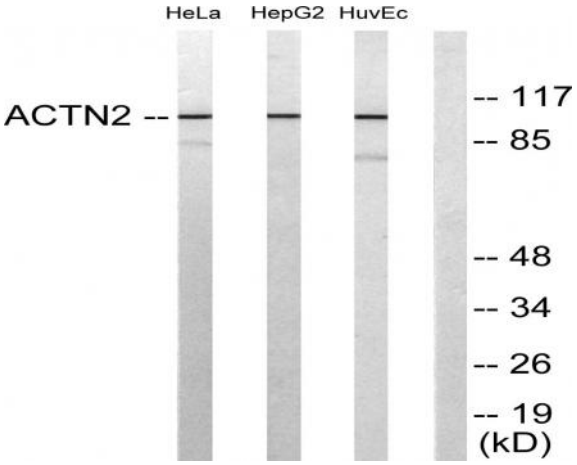
Western Blot analysis of HuvEc cells using Actinin-α2/3 Polyclonal Antibody



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.



Western blot analysis of lysates from HepG2, HeLa, and HUVEC cells, using Actinin alpha-2/3 Antibody. The lane on the right is blocked with the synthesized peptide.