



Actinin- α 3 Polyclonal Antibody

Catalog No	YP-Ab-16925
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;ELISA
Gene Name	ACTN3
Protein Name	Alpha-actinin-3
Immunogen	The antiserum was produced against synthesized peptide derived from human ACTN3. AA range:1-50
Specificity	Actinin- α 3 Polyclonal Antibody detects endogenous levels of Actinin- α 3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	ACTN3; Alpha-actinin-3; Alpha-actinin skeletal muscle isoform 3; F-actin cross-linking protein
Observed Band	103kD
Cell Pathway	intracellular, cytosol, actin filament, brush border, focal adhesion, Z disc, pseudopodium, extracellular exosome,
Tissue Specificity	Expressed only in a subset of type 2 skeletal muscle fibers.
Function	function:F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein.,polymorphism:About 18% of the world population lack a functional ACTN3 due to a stop codon polymorphism at position 577. The absence of a functional ACTN3 expression is not correlated with a disease state.,sequence caution:According to the human genome assembly there is a stop codon in position 577 which is only found in 18% of the world population.,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.,subunit:Homodimer; antiparallel. Also forms heterodimers with ACTN2. Interacts with MYOZ1.,tissue specificity:Expressed only in a subset of type 2 skeletal muscle fibers.,

Background

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. [provided by RefSeq, Feb 2014],

matters needing attention

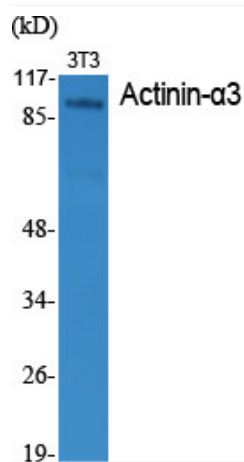
Avoid repeated freezing and thawing!

Usage suggestions

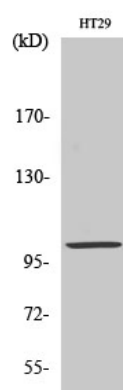
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



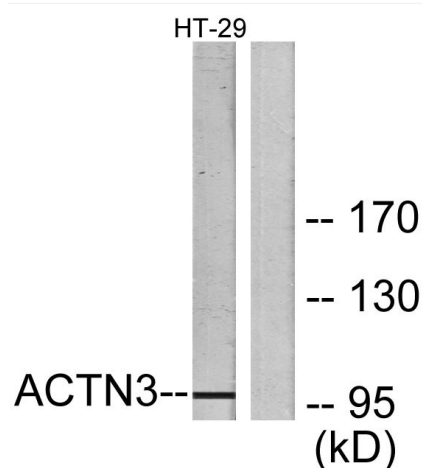
Products Images



Western Blot analysis of various cells using Actinin-α3 Polyclonal Antibody



Western Blot analysis of HT29 cells using Actinin-α3 Polyclonal Antibody



Western blot analysis of lysates from HT-29 cells, using ACTN3 Antibody. The lane on the right is blocked with the synthesized peptide.