

## Actinin-a3 Polyclonal Antibody

Catalog No: YT0103

Reactivity: Human; Mouse; Rat

**Applications:** WB;IF;ELISA

**Target :** Actinin-α3

**Fields:** >>Arrhythmogenic right ventricular cardiomyopathy

Gene Name: ACTN3

Protein Name: Alpha-actinin-3

Human Gene Id: 89

**Human Swiss Prot** 

No:

Mouse Gene Id: 11474

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

ACTN3. AA range:1-50

Q08043

O88990

**Specificity:** Actinin-a3 Polyclonal Antibody detects endogenous levels of Actinin-a3 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. 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

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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:** 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],

**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..

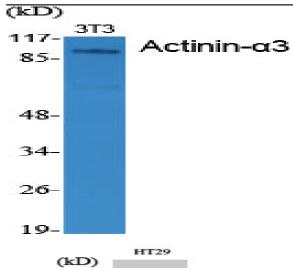
**Subcellular** intracellular,cytosol,actin filament,brush border,focal adhesion,Z

**Location**: disc,pseudopodium,extracellular exosome,

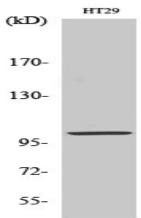
**Expression :** Expressed only in a subset of type 2 skeletal muscle fibers.

## **Products Images**

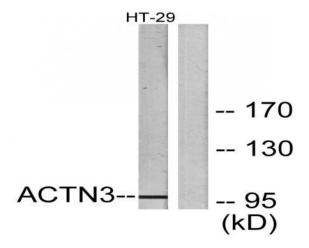
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Western Blot analysis of various cells using Actinin-α3 Polyclonal Antibody



Western Blot analysis of HT29 cells using Actinin- $\alpha$ 3 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.