

Actin a3 Polyclonal Antibody

Catalog No: YT0098

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: Actin a3

Fields: >> Vascular smooth muscle contraction

Gene Name: ACTG2

Protein Name: Actin gamma-enteric smooth muscle

P63267

11468

P63268

Human Gene ld: 72

Human Swiss Prot

No:

Mouse Gene Id:

Mouse Swiss Prot

No:

Rat Gene ld: 25365

Rat Swiss Prot No: P63269

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

Actin-gamma2. AA range:1-50

Specificity: Actin a3 Polyclonal Antibody detects endogenous levels of Actin 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. 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: 45kD

Cell Pathway: Vascular smooth muscle contraction;

Background: Actins are highly conserved proteins that are involved in various types of cell

motility and in the maintenance of the cytoskeleton. Three types of actins, alpha, beta and gamma, have been identified in vertebrates. Alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins co-exist in most cell types as components of the cytoskeleton and as mediators of internal cell motility. This gene encodes actin gamma 2; a smooth muscle actin found in enteric tissues. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Based on similarity to peptide cleavage of related actins, the mature protein of this gene is formed by

removal of two N-terminal peptides.[provided by RefSeq, Dec 2010],

Function: function: Actins are highly conserved proteins that are involved in various types

of cell motility and are ubiquitously expressed in all eukaryotic

cells.,miscellaneous:In vertebrates 3 main groups of actin isoforms, alpha, beta and gamma have been identified. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins coexist in most cell types as components of the cytoskeleton and as

mediators of internal cell motility., similarity: Belongs to the actin

family.,subunit:Polymerization of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded helix. Each actin can bind to 4

others.,

Subcellular Location:

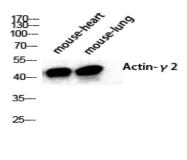
Cytoplasm, cytoskeleton.

Expression : In the intestine, abundantly expressed in smooth muscle cells of muscularis

mucosa and muscularis propria. Also detected in intestinal vascular smooth

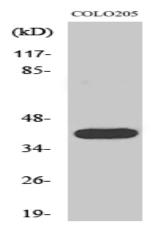
muscle cells.

Products Images

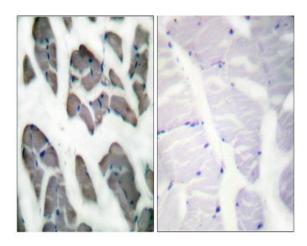


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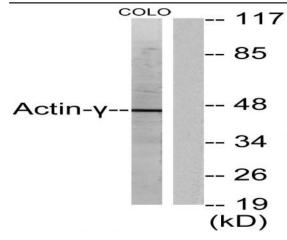
Western Blot analysis of various cells using Actin $\alpha 3$ Polyclonal Antibody diluted at 1:2000



Western Blot analysis of COLO205 cells using Actin α 3 Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue, using Actin-gamma2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO205 cells, using Actingamma2 Antibody. The lane on the right is blocked with the synthesized peptide.