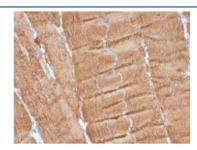


# Actin alpha 1 Antibody / ACTA1 [clone ACTA1/360] (V9696)

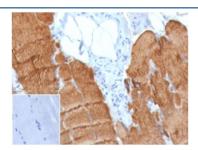
Catalog No.	Formulation	Size
V9696-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9696-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20
V9696SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100

## **Bulk quote request**

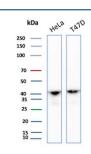
Availability	1-3 business days
Species Reactivity	Human (broad species reactivity predicted)
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ACTA1/360
Purity	Protein A/G affinity
UniProt	P68133
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This Actin alpha 1 antibody is available for research use only.



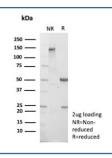
IHC staining of FFPE human skeletal muscle with Actin alpha 1 antibody (clone ACTA1/360). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human skeletal muscle tissue with Actin alpha 1 (clone ACTA1/360). Negative control inset: PBS instead of primary antibody to control for secondary binding. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Western blot testing of human HeLa and T-47D cell lysate with Actin alpha 1 antibody. Predicted molecular weight ~42 kDa.



SDS-PAGE analysis of purified, BSA-free Actin alpha 1 antibody (clone ACTA1/360) as confirmation of integrity and purity.

#### **Description**

All eukaryotic cells express Actin, which often constitutes as much as 50% of total cellular protein. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. While lower eukaryotes, such as yeast, have only one Actin gene, higher eukaryotes have several isoforms encoded by a family of genes. At least six types of Actin are present in mammalian tissues and fall into three classes. a-Actin expression is limited to various types of muscle, whereas b and g are the principle constituents of filaments in other tissues. Members of the small GTPase family regulate the organization of the Actin cytoskeleton. Rho controls the assembly of Actin stress fibers and focal adhesion, Rac regulates Actin filament accumulation at the plasma membrane and Cdc42 stimulates formation of filopodia.

## **Application Notes**

Optimal dilution of the Actin alpha 1 antibody should be determined by the researcher.

#### **Immunogen**

Recombinant human ACTA1 protein was used as the immunogen for the Actin alpha 1 antibody.

#### **Storage**

Aliquot the Actin alpha 1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.