

Anti-ACTA2 Rabbit Monoclonal Antibody
Rabbit Monoclonal Antibody
Catalog # ABV11812**Specification**

Anti-ACTA2 Rabbit Monoclonal Antibody - Product Information

Application	IHC, WB
Primary Accession	P62736
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	42009

Anti-ACTA2 Rabbit Monoclonal Antibody - Additional Information**Gene ID 59**

Positive Control	WB: heart tissue lysate, IHC: kidney and heart tissue sections
Application & Usage	IHC: 1:1000 -1:2500 dilution; WB: 1:1000 - 1:2000 dilution
Alias Symbol	ACTA2
Other Names	
alpha smooth muscle Actin Alpha-actin-2, Cell growth-inhibiting gene 46 protein	

Appearance
Colorless liquid**Formulation**
In 50% Glycerol/PBS with 1% BSA and 0.09% sodium azide**Reconstitution & Storage**
-20 °C**Background Descriptions****Precautions**

Anti-ACTA2 Rabbit Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-ACTA2 Rabbit Monoclonal Antibody - Protein Information**Name** ACTA2**Synonyms** ACTSA, ACTVS

Function

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

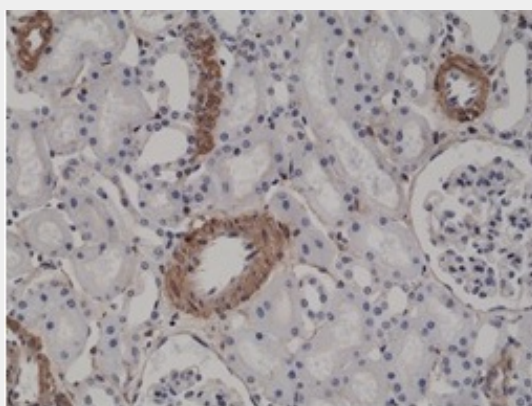
Cellular Location

Cytoplasm, cytoskeleton.

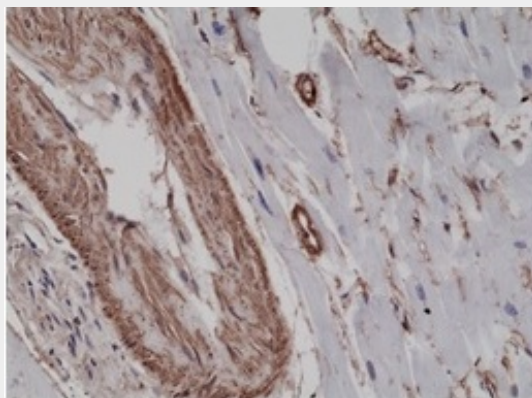
Anti-ACTA2 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

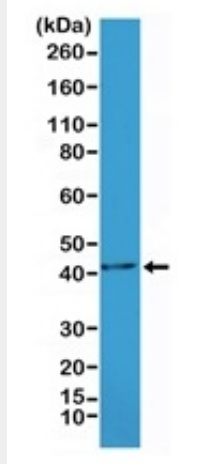
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ACTA2 Rabbit Monoclonal Antibody - Images

Immunohistochemical staining of formalin fixed and paraffin embedded human kidney tissue sections using anti-ACTA2 antibody at 1:2500 dilution.



Immunohistochemical staining of formalin fixed and paraffin embedded human heart tissue sections using anti-ACTA2 antibody at 1:2500 dilution.



Western blot of mouse heart tissue lysate using anti-ACTA2 antibody at 1:1000 dilution.

Anti-ACTA2 Rabbit Monoclonal Antibody - Background

Actins are highly conserved proteins expressed in all eucaryotic cells. Actin filaments form part of the cytoskeleton and play essential roles in regulating cell shape and movement. Six distinct actin isoforms have been identified in mammalian cells. Each is encoded by a separated gene and is expressed in a developmentally regulated and tissue-specific manner, alpha and beta cytoplasmic actins are expressed in a wide variety of cells; whereas, expression of alpha skeletal, alpha cardiac, alpha vascular, and gamma enteric actins are more restricted to specialized muscle cell type. Smooth muscle alpha actin is of further interest because it is one of a few genes whose expression is relatively restricted to vascular smooth muscle cells. Furthermore, expression of smooth muscle alpha actin is regulated by hormones, cell proliferation, and altered by pathological conditions including oncogenic transformation and atherosclerosis.