

# Anti-ACTA2 Rabbit Monoclonal Antibody

Rabbit Monoclonal Antibody Catalog # ABV11812

## **Product Information**

**Application** WB, IHC **Primary Accession** P62736

**Reactivity** Human, Mouse

Host Rabbit
Clonality Monoclonal
Isotype Rabbit IgG
Calculated MW 42009

#### **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.

#### **Protein Information**

Name ACTA2

**Synonyms** ACTSA, ACTVS

**Function** Actins are highly conserved proteins that are involved in various types of cell

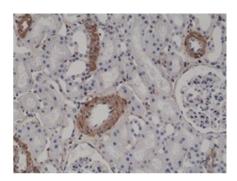
motility and are ubiquitously expressed in all eukaryotic cells.

**Cellular Location** Cytoplasm, cytoskeleton.

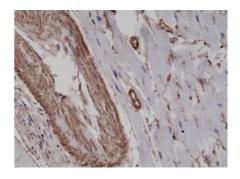
# **Background**

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 isotypes 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.

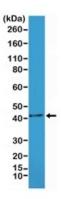
### **Images**



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.