

DATASHEET

FOR IN VITRO RESEARCH USE ONLY NOT FOR USE IN HUMANS OR ANIMALS USA: proteintech@ptglab.com Europe: europe@ptglab.com China: service@ptglab.com

ACTA2/smooth muscle actin Polyclonal Antibody

Catalog number: 14395-1-AP Size: 44 μg/150 μl Source: Rabbit Isotype: IgG Synonyms: ACTA2; a SMA, AAT6, ACTA2, ACTA2 Smooth muscle Actin, Actin, aortic smooth muscle, Actin, aortic smooth muscle Actin, ACTSA, ACTVS, Alpha actin 2, Alpha SMA, a-SMA, α SMA



Immunohistochemical of paraffinembedded human hysteromyoma using 14395-1-AP(ACTA2 antibody) at dilution of 1:50 (under 10x lens)



Immunohistochemical of paraffinembedded human hysteromyoma using 14395-1-AP(ACTA2 antibody) at dilution of 1:50 (under 40x lens)



IP Result of anti-ACTA2 (IP:14395-1-AP, 3ug; Detection:14395-1-AP 1:1000) with mouse liver tissue lysate 6000ug.

Background

ACTA2 (also known as α -smooth muscle actin or α -SMA) belongs to the actin family. Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. ACTA2 is primarily expressed in vascular smooth muscle and anti-ACTA2 is commonly used to marker smooth muscle cells. This antibody may cross-react with other isoforms of actins.

Applications

Tested applications:	ELISA, IHC, IP, WB, FC, IF
Cited applications:	IF, IHC, WB
Species specificity:	Human,Mouse,Rat; other species not tested.
Cited species:	Human, mouse, rat
Caculated ACTA2/smooth	377aa,42 kDa
muscle actin MW:	
Observed ACTA2/smooth	43 kDa
muscle actin MW:	
Positive WB detected in	Human placenta tissue, HEK-293 cells, human bladder
	tissue, K-562 cells, mouse heart tissue, mouse kidney
	tissue, mouse liver tissue, mouse ovary tissue, rat heart
	tissue
Positive IP detected in	Mouse liver tissue
Positive IHC detected in	Human hysteromyoma tissue, human heart tissue,
	human liver cancer tissue, human liver tissue, human
	skeletal muscle tissue
Positive IF detected in	C2C12 cell
Positive FC detected in	C2C12 cell
Recommended dilution:	W B: 1:500-1:5000
	IP: 1:500-1:5000
	IHC: 1:20-1:200
	IF: 1:20-1:200
	FC: N/A

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag5886
GenBank accession number:	BC017554
Gene ID (NCBI):	59
Full name:	Actin, alpha 2, smooth muscle, aorta

Product information

Purification method:	
Storage:	

Antigen affinity purification PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Store at -20°C.







1X10^6 C2C12 cell were stained with 0.2ug ACTA2 antibody (14395-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.



Immunofluorescent analysis of (-20 Ethanol) fixed C2C12 cell using 14395-1-AP(ACTA2 Antibody) at dilution of 1:50 and Alexa Fluor 488congugated AffiniPure Goat Anti-Rabbit IgG(H+L)