

For Research Use Only

ACTN4 Polyclonal antibody

Catalog Number: 19096-1-AP

Featured Product

14 Publications



Basic Information

Catalog Number:
19096-1-AP

Size:
150ul, Concentration: 550 µg/ml by Nanodrop and 407 µg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG13546

GenBank Accession Number:
BC005033

GeneID (NCBI):
81

Full Name:
actinin, alpha 4

Calculated MW:
105 kDa

Observed MW:
100-105 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB
IHC 1:50-1:500
IF 1:10-1:100

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
CoIP, ELISA, IF, IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HEK-293T cells, mouse liver tissue, HeLa cells, Jurkat cells, C2C12 cells, NIH/3T3 cells, mouse skeletal muscle, rat skeletal muscle

IP: HeLa cells,

IHC: human lung cancer tissue, human breast cancer tissue

IF: MCF-7 cells, HeLa cells

Background Information

ACTN4 (alpha actinin 4) is a ubiquitous actin-binding protein that cross-links actin filaments into bundles to form filopodia, and has a crucial role in cytoskeletal organization. ACTN4 is colocalized with actin stress fibers and is dispersed in the cytoplasm and in the nucleus. Increased levels of ACTN4 have been associated with cancer metastasis, indicating its implication in cancer cell migration and metastasis. Defects in ACTN4 cause glomerular disease. This antibody recognizes 100-105 kDa of endogenous ACTN4 protein in various lysates. (22370640, 10700177)

Notable Publications

Author	Pubmed ID	Journal	Application
Ming-Chuan Wang	25299231	J Thorac Oncol	ELISA
Qiang Wang	34606417	Bioengineered	WB
Hongfei Ge	27874083	Sci Rep	WB,IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

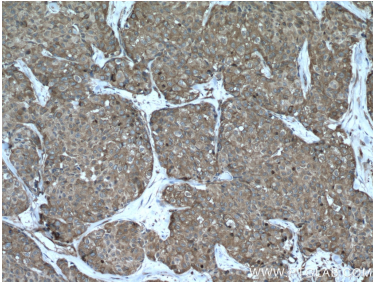
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

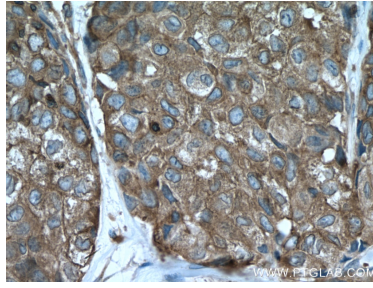
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

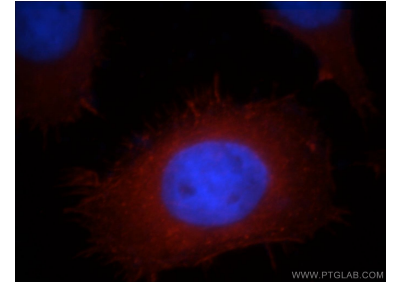
Selected Validation Data



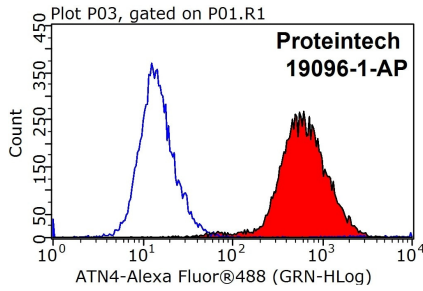
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19096-1-AP (ACTN4 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



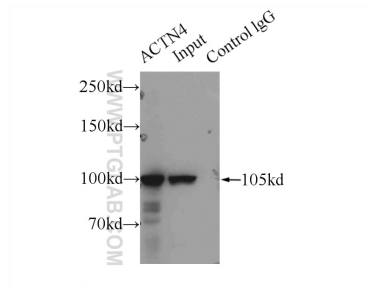
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19096-1-AP (ACTN4 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



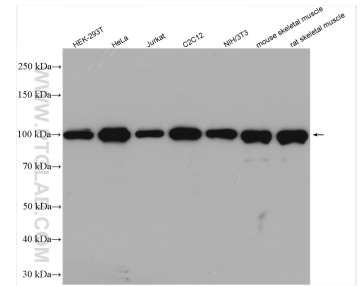
Immunofluorescent analysis of MCF-7 cells, using ACTN4 antibody 19096-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



1X10⁶ HeLa cells were stained with 0.2ug ACTN4 antibody (19096-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



IP Result of anti-ACTN4 (IP:19096-1-AP, 5ug; Detection:19096-1-AP 1:1000) with HeLa cells lysate 3000ug.



Various lysates were subjected to SDS PAGE followed by western blot with 19096-1-AP (ACTN4) antibody at dilution of 1:25000 incubated at room temperature for 1.5 hours.