

Rabbit Arp2/ACTR2 Polyclonal Antibody | anti-ACTR2 antibody

Anti-Arp2/ACTR2 Antibody

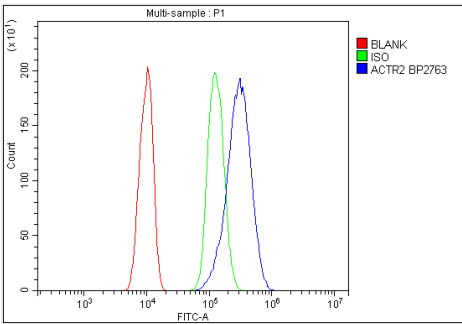
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19284	Rabbit	Human, Mouse, Monkey, Rat	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

Arp2/ACTR2; Polyclonal Antibody; Anti-Arp2/ACTR2 Antibody; Actin-related protein 2; Actin-like protein 2; ACTR2; ARP2; actin related protein 2; anti-ACTR2 antibody

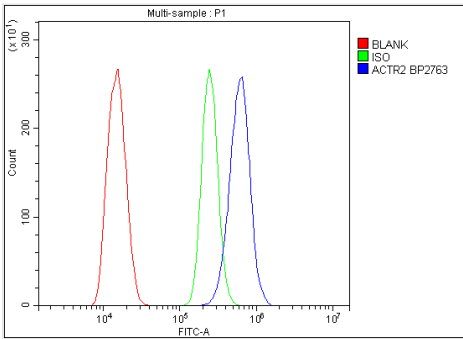
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Monkey, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Arp2/ACTR2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-ACTR2 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.25-0.5ug/ml Human, Mouse, Monkey, Rat IHC-P: 0.5-1ug/ml Human ICC/IF: 4ug/ml Human FC/FACS/FCM: 1-3ug/1x106 cells Human, Mouse, Rat Direct ELISA: 0.1-0.5ug/ml Human
Immunogen	E Coli-derived human Arp2/ACTR2 recombinant protein (Position: M1-R394).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



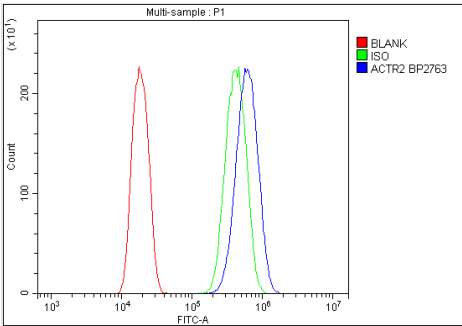
FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of C6 cells using anti-Arp2/ACTR2 antibody (AAA19284).Overlay histogram showing C6 cells stained with AAA19284 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Arp2/ACTR2 Antibody (AAA19284,1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



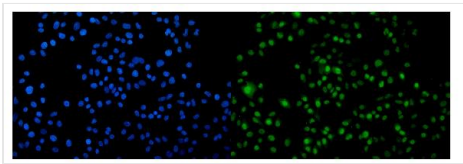
FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of ANA-1 cells using anti-Arp2/ACTR2 antibody (AAA19284).Overlay histogram showing ANA-1 cells stained with AAA19284 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Arp2/ACTR2 Antibody (AAA19284,1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



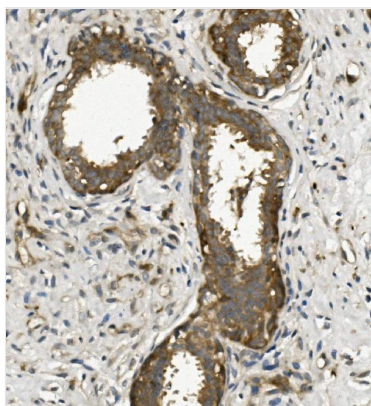
FCM (Flow Cytometry)

Figure 4. Flow Cytometry analysis of A431 cells using anti-Arp2/ACTR2 antibody (AAA19284).Overlay histogram showing A431 cells stained with AAA19284 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Arp2/ACTR2 Antibody (AAA19284,1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



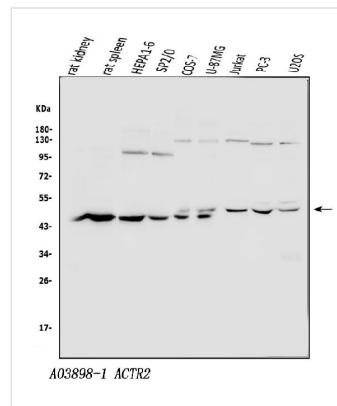
IF (Immunofluorescence)

Figure 3. IF analysis of Arp2/ACTR2 using anti-Arp2/ACTR2 antibody (AAA19284).Arp2/ACTR2 was detected in immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 4μg/mL rabbit anti-Arp2/ACTR2 Antibody (AAA19284) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Arp2/ACTR2 using anti-Arp2/ACTR2 antibody (AAA19284). Arp2/ACTR2 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μg/ml rabbit anti-Arp2/ACTR2 Antibody (AAA19284) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



WB (Western Blot)

Figure 1. Western blot analysis of Arp2/ACTR2 using anti-Arp2/ACTR2 antibody (AAA19284). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50 μg of sample under reducing conditions. Lane 1: rat kidney tissue lysates; Lane 2: rat spleen tissue lysates; Lane 3: mouse HEPA1-6 whole cell lysates; Lane 4: mouse SP2/0 whole cell lysates; Lane 5: monkey COS-7 whole cell lysates; Lane 6: human U-87MG whole cell lysates; Lane 7: human Jurkat whole cell lysates; Lane 8: human PC-3 whole cell lysates; Lane 9: human U2OS whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Arp2/ACTR2 antigen affinity purified polyclonal antibody (Catalog # AAA19284) at 0.5 μg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # with Tanon 5200 system). A specific band was detected for Arp2/ACTR2 at approximately 45KD. The expected band size for Arp2/ACTR2 is at 45KD.

ADDITIONAL INFORMATION

Related Product Information for anti-ACTR2 antibody	The specific function of this gene has not yet been determined; however, the protein it encodes is known to be a major constituent of the ARP2/3 complex. This complex is located at the cell surface and is essential to cell shape and motility through lamellipodial actin assembly and protrusion. Two transcript variants encoding different isoforms have been found for this gene.
References	- Caridi, C. P., D'Agostino, C., Ryu, T., Zapotoczny, G., Delabaere, L., Li, X., Khodaverdian, V. Y., Amaral, N., Lin, E., Rau, A. R., Chiolo, I. Nuclear F-actin and myosins drive relocalization of heterochromatic breaks. <i>Nature</i> 559: 54-60, 2018. - Hanisch, J., Kolm, R., Wozniczka, M., Bumann, D., Rottner, K., Stradal, T. E. B. Activation of a RhoA/myosin II-dependent but Arp2/3 complex-independent pathway facilitates Salmonella invasion. <i>Cell Host Microbe</i> 9: 273-285, 2011. - Li, P., Banjade, S., Cheng, H. -C., Kim, S., Chen, B., Guo, L., Llaguno, M., Hollingsworth, J. V., King, D. S., Banani, S. F., Russo, P. S., Jiang, Q. -X., Nixon, B. T., Rosen, M. K. Phase transitions in the assembly of multivalent signalling proteins. <i>Nature</i> 483: 336-340, 2012.

NCBI AND UNIPROT INFORMATION

NCBI GI #	5031571
NCBI GeneID	10097
NCBI Accession #	NP_005713.1
NCBI GenBank Nucleotide #	NM_005722.3
UniProt Accession #	P61160; O15142; Q96C82; B2RCP5; D6W5F4; E9PF41
Molecular Weight	45,377 Da
NCBI Official Full Name	actin-related protein 2 isoform b
NCBI Official Synonym Full Names	ARP2 actin-related protein 2 homolog (yeast)

NCBI Official Symbol	ACTR2
NCBI Official Synonym Symbols	ARP2
NCBI Protein Information	actin-related protein 2; actin-like protein 2
UniProt Protein Name	Actin-related protein 2
UniProt Gene Name	ACTR2
UniProt Synonym Gene Names	ARP2
UniProt Entry Name	ARP2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/arp2-actr2-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-direct-elisa-elisa/19284>