

Rabbit Arp2 Polyclonal Antibody | anti-Arp2 antibody

Arp2 (Thr-237/Thr-238), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71568	Rabbit	Human, Rat, Mouse, Chicken	Immunocytochemistry, ELISA, Western Blot

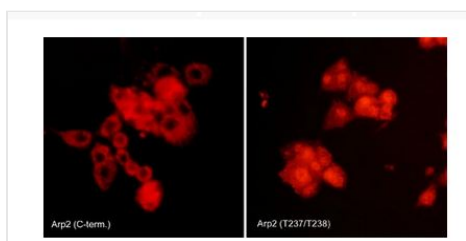
PRODUCT SYNONYMS

Arp2; Polyclonal Antibody; Arp2 (Thr-237/Thr-238); phospho-specific Antibody; phospho-specific; Arp2 Thr; anti-Arp2 antibody

PRODUCT SPECIFICATIONS

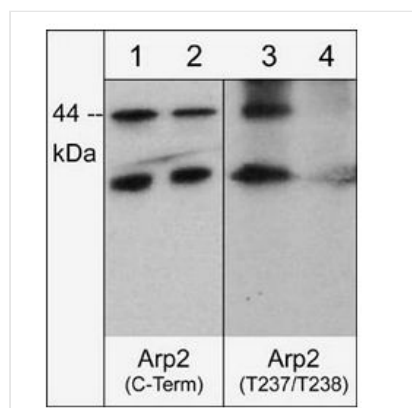
Host	Rabbit
Reactivity	Human, Rat, Mouse, Chicken
Clonality	Polyclonal
Specificity	This antibody was affinity purified using phospho-Arp2 (Thr-237/Thr-238) peptide (without carrier). The antibody detects 44 and 32kDa* proteins corresponding to the molecular mass of Arp2 on SDS-PAGE immunoblots of human A431 and Jurkat cells treated with Calyculin A. This reactivity is not observed after lambda phosphatase treatment.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-Arp2 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-Arp2 (Thr-237/Thr-238) synthetic peptide (coupled to KLH) corresponding to amino acid residues surrounding threonine 237 and threonine 238 in human Arp2. This peptide sequence is highly conserved in rat, mouse, chicken, and fish Arp2 proteins.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of Arp2 phosphorylation in rat PC12 cells differentiated with NGF. The cells were probed with Arp2 (C-terminal region) and Arp2 (Thr-237/Thr-238) rabbit polyclonal antibodies, then the antibodies were detected using appropriate secondary antibody conjugated to Cy3.



WB (Western Blot)

Western blot of human A431 cells treated with Calyculin A (100nM) for 30 min. Blot lanes were untreated (lanes 1 & 3) or treated with lambda phosphatase (lanes 2 & 4) then probed with anti-Arp2 (C-terminal) (lanes 1 & 2) or anti-Arp2 (Thr-237/Thr-238) (lanes 3 & 4).

ADDITIONAL INFORMATION

Related Product Information for anti-Arp2 antibody	Cellular morphology, adhesion, and motility occur through dynamic reorganization of actin-based superstructures. Actin-binding proteins are critical for regulating actin polymerization and superstructure formation. The Arp2/3 complex is an actin polymerization-inducing complex that includes Arp2, Arp3, p41-Arc, p34-Arc, p21-Arc, p20-Arc, and p16-Arc. Several nucleation promoting factors, such as WASP and coronin, regulate the activity of the Arp2/3 complex. In addition, the Arp2/3 complex may be regulated by phosphorylation of specific subunits in the complex. Arp2 has two phosphosites, Thr-237 and Thr-238, that are evolutionarily conserved, and are phosphorylated along with Tyr-202 in response to growth factor stimulation. These phosphorylation events may regulate binding to the pointed end of actin filaments, and alanine substitutions of these Arp2 phosphosites inhibit membrane protrusions. Thus, phosphorylation may be another mode of Arp2/3 complex regulation in addition to the activity of nucleation-promoting factors.
References	Soderling, S.H. (2009). Sci Signal. 2(55):pe5 (Review). LeClaire, L.L. et al (2008). J Cell Biol. 182(4):647. .Kelleher, J.F. et al. (1995). J Cell Biol. 131(2):385.

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.