



Rabbit Anti-ARP2 antibody

SL12524R

Product Name:	ARP2
Chinese Name:	肌动蛋白相关蛋白2/3抗体
Alias:	Actin like protein 2; Actin related protein 2; Actin-like protein 2; ACTIN-RELATED PROTEIN 2; ACTR2; ARP2 actin related protein 2 homolog (yeast); ARP2; ARP2 HUMAN; OTTHUMP00000159937; OTTHUMP00000202270.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Xenopus laevis, Orangutan
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ARP2/ARP3:301-394/394
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Actin polymerization is required for a variety of cell functions, including chemotaxis, cell migration, cell adhesion, and platelet activation. Cells trigger actin polymerization through either the de novo nucleation of filaments from monomeric actin, the severing of existing filaments to create uncapped barbed ends, or the uncapping of existing barbed ends. The nucleation of actin is a rate-limiting and unfavorable reaction in actin

polymerization and therefore requires the involvement of the Arp2/3 complex, which helps create new filaments and promotes the end-to-side cross-linking of actin filaments into the branching meshwork. The Arp2/3 complex consists of the actin-related proteins Arp2 and Arp3, and various other accessory proteins. The Arp2/3 complex promotes actin nucleation by binding the pointed end of actin filaments, or by associating with the side of an existing filament, and nucleates growth in the barbed direction. In addition, the Arp2/3 complex also mediates actin cytoskeletal outgrowths that are regulated by the Rho family of small GTPases. In response to GTP-binding Cdc42, the Arp2/3 complex binds the Cdc42 substrates, namely the WASP proteins, and initiates the formation of lamellipodia and filopodia.

Function:

Functions as ATP-binding component of the Arp2/3 complex which is involved in regulation of actin polymerization and together with an activating nucleation-promoting factor (NPF) mediates the formation of branched actin networks. Seems to contact the pointed end of the daughter actin filament.

Subunit:

Component of the Arp2/3 complex composed of ARP2, ARP3, ARPC1B/p41-ARC, ARPC2/p34-ARC, ARPC3/p21-ARC, ARPC4/p20-ARC and ARPC5/p16-ARC.

Subcellular Location:

Cytoplasm; cytoskeleton. Cell projection.

Similarity:

Belongs to the actin family. ARP2 subfamily.

SWISS:

P61160

Gene ID:

10097

Database links:

[Entrez Gene: 10097](#)Human

[Entrez Gene: 66713](#)Mouse

[Entrez Gene: 289820](#)Rat

[Entrez Gene: 396147](#)Chicken

[Omim: 604221](#)Human

[SwissProt: P53488](#)Chicken

[SwissProt: P61160](#)Human

[SwissProt: P61161](#)Mouse

[SwissProt: Q5M7U6](#)Rat

[Unigene: 643727](#)Human

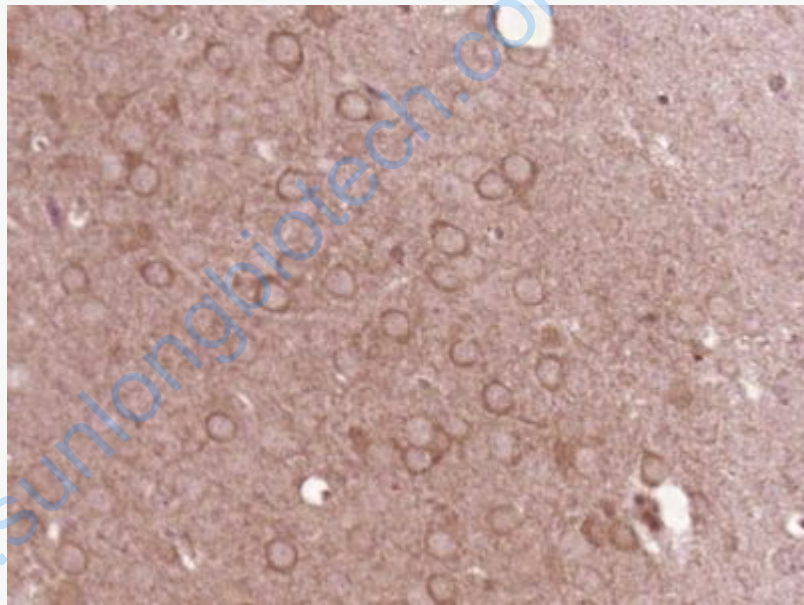
[Unigene: 259045](#)Mouse

[Unigene: 102249](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ARP2) Polyclonal Antibody, Unconjugated (SL12524R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.