

## Rabbit Anti-ARP2/PE Conjugated antibody

SL12524R-PE

<b>Product Name</b>	Anti-ARP2/PE
<b>Chinese Name</b>	PE 标记的肌动蛋白相关蛋白 2/3 抗体
<b>Alias</b>	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.
<b>Research Area</b>	Tumour Cell biology Signal transduction Cell adhesion molecule Cell differentiation Cytoskeleton
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Mouse(predicted:Human,Rat,Chicken,Pig,Cow, Orangutan) IF=1:100-500
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	45kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human ARP2/ARP3
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Product Detail</b>	<b>background:</b> 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.

**Database links:**

[Entrez Gene: 10097](#) Human

[Entrez Gene: 66713](#) Mouse

[Entrez Gene: 289820](#) Rat

[Entrez Gene: 396147](#) Chicken

[Oimim: 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.