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KD-Validated Anti-ARPC2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1306

Specification

KD-Validated Anti-ARPC2 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	O15144
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 34 kDa , observed, 34 kDa KDa**
Gene Name	**ARPC2**
Aliases	**Actin Related Protein 2/3 Complex Subunit 2;ARC34;P34-Arc;Actin-Related Protein 2/3 Complex Subunit;Arp2/3 Complex 34 KDa Subunit;Actin Related Protein 2/3 Complex, Subunit 2 (34 KD) ;Actin Related Protein 2/3 Complex, Subunit 2, 34kDa ;Actin Related Protein 2/3 Complex Subunit 2, 34kDa ;Testis Tissue Sperm-Binding Protein Li 53e ;ARP2/3 Protein Complex Subunit 34 ;PNAS-139 ;PRO2446;P34-ARC**
Immunogen	**A synthesized peptide derived from human ARPC2**

KD-Validated Anti-ARPC2 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**10109**

Other Names
Actin-related protein 2/3 complex subunit 2, Arp2/3 complex 34 kDa subunit, p34-ARC, ARPC2, ARC34

KD-Validated Anti-ARPC2 Rabbit Monoclonal Antibody - Protein Information

Name ARPC2

Synonyms ARC34

Function
Actin-binding component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF) (PubMed:9230079). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:9230079). Seems to contact the mother actin filament (PubMed:9230079). In addition to its role in the cytoplasmic cytoskeleton, the Arp2/3 complex also promotes actin polymerization in

the nucleus, thereby regulating gene transcription and repair of damaged DNA (PubMed:29925947). The Arp2/3 complex promotes homologous recombination (HR) repair in response to DNA damage by promoting nuclear actin polymerization, leading to drive motility of double-strand breaks (DSBs) (PubMed:29925947).

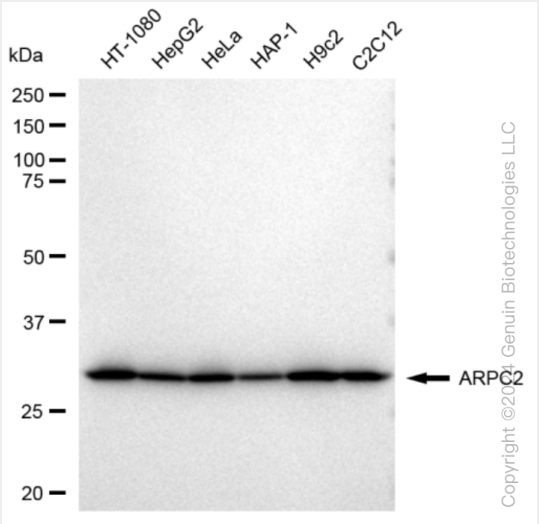
Cellular Location
Cytoplasm, cytoskeleton. Cell projection. Synapse, synaptosome {ECO:0000250|UniProtKB:Q9CVB6}. Nucleus

KD-Validated Anti-ARPC2 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-ARPC2 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-ARPC2 antibody (Cat#AGI1306). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ARPC2 antibody (Cat#AGI1306, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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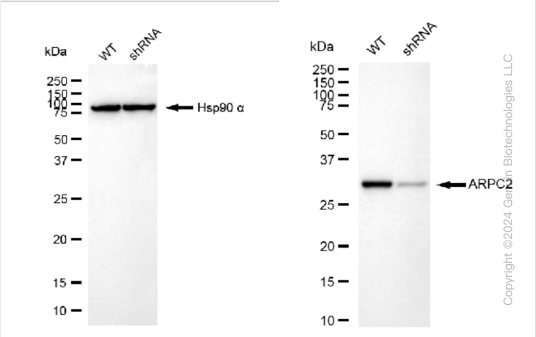
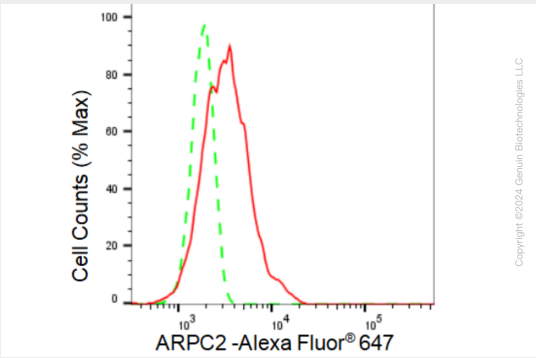
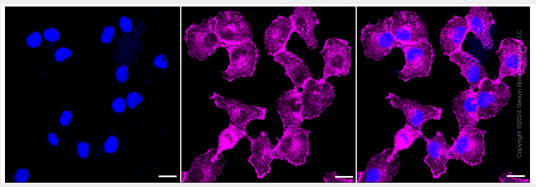


Western blotting analysis using anti-ARPC2 antibody (Cat#AGI1306). ARPC2 expression in wild type (WT) and ARPC2 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ARPC2 antibody (Cat#AGI1306, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ARPC2 expression in HT-1080 cells using ARPC2 antibody (Cat#AGI1306, 1:2,000). Green, isotype control; red, ARPC2.



Immunocytochemical staining of HT-1080 cells with ARPC2 antibody (Cat#AGI1306, 1:1,000). Nuclei were stained blue with DAPI; ARPC2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.