

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 015144

Reactivity
Clonality
Monoclonal
Isotype
Rat, Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 34 kDa , observed, 34 kDa KDa

Gene Name ARPC2

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" target="_blank">9230079" target="_blank">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

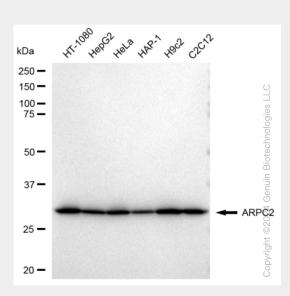
Cytoplasm, cytoskeleton. Cell projection. Synapse, synaptosome {ECO:0000250|UniProtKB:Q9CVB6}. Nucleus

KD-Validated Anti-ARPC2 Rabbit Monoclonal Antibody - Protocols

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

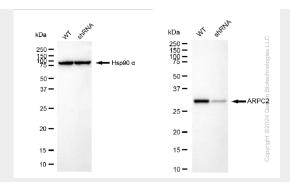
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-ARPC2 Rabbit Monoclonal Antibody - Images

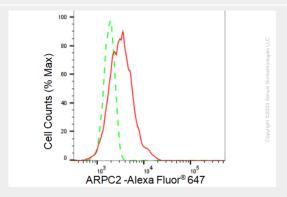


Western blotting analysis using anti-ARPC2 antibody (Cat#61565). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ARPC2 antibody (Cat#61565, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ $^{\text{TM}}$ ECL Substrate Kit (Cat#226).

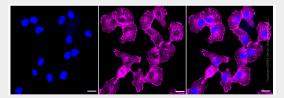




Western blotting analysis using anti-ARPC2 antibody (Cat#61565). ARPC2 expression in wild type (WT) and ARPC2 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ARPC2 antibody (Cat#61565, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ $^{\text{TM}}$ ECL Substrate Kit (Cat#226).



Flow cytometric analysis of ARPC2 expression in HT-1080 cells using ARPC2 antibody (Cat#61565, 1:2,000). Green, isotype control; red, ARPC2.



Immunocytochemical staining of HT-1080 cells with ARPC2 antibody (Cat#61565, 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 μ m.