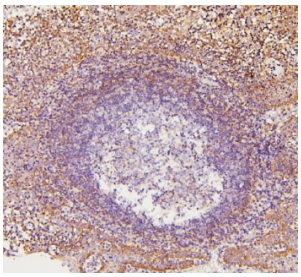
ARPC1B Antibody / Actin-related protein 2/3 complex subunit 1B (RQ4972)

Catalog No.	Formulation	Size
RQ4972	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

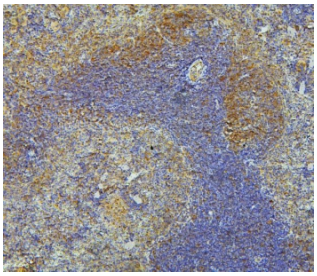
Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O15143
Localization	Cytoplasmic, Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml Immunoprecipitation : 2ug per 500ug of lysate
Limitations	This ARPC1B antibody is available for research use only.

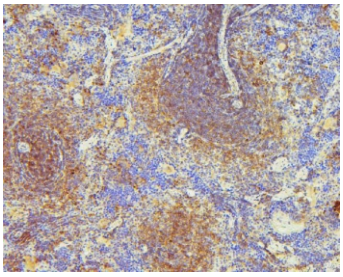
IHC staining of FFPE human tonsil with ARPC1B antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



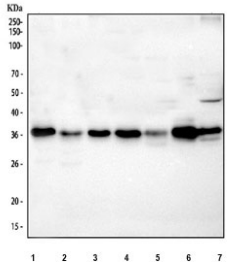
IHC staining of FFPE human tonsil with ARPC1B antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



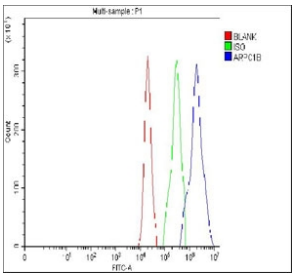
IHC staining of FFPE mouse spleen with ARPC1B antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



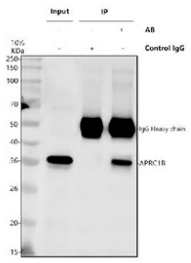
IHC staining of FFPE rat spleen with ARPC1B antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



Western blot testing of 1) human PC-3, 2) human U937, 3) human HeLa, 4) rat spleen, 5) rat thymus, 6) mouse spleen and 7) mouse thymus tissue lysate with ARPC1B antibody. Predicted molecular weight ~41 kDa.



Flow cytometry testing of fixed and permeabilized human U937 cells with ARPC1B antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ARPC1B antibody.



Immunoprecipitation of ARPC1B protein from 500ug of human HeLa whole cell lysate with 2ug of ARPC1B antibody.

Description

ARPC1B, or Actin-related protein 2/3 complex subunit 1B, is a vital component of the Arp2/3 complex, which plays a central role in the regulation of the actin cytoskeleton. This complex initiates the formation of branched actin networks, contributing to various cellular processes such as cell migration, endocytosis, and immune synapse formation. ARPC1B is one of two isoforms of the ARPC1 subunit, the other being ARPC1A, and is known to be predominantly expressed in hematopoietic cells, where it supports specialized immune functions.

Deficiency or mutation of ARPC1B has been associated with immunodeficiency syndromes characterized by platelet abnormalities, recurrent infections, and immune dysregulation. Because of its critical function in cytoskeletal organization and immune cell dynamics, ARPC1B is increasingly studied in immunology and cell biology. Multiple isoforms of ARPC1B have been reported, suggesting possible differential roles across tissues or developmental stages.

The ARPC1B antibody is an essential tool for researchers studying actin remodeling, immune cell signaling, and cytoskeletal architecture. A high-quality ARPC1B antibody enables accurate detection of the protein in western blot, immunofluorescence, and immunohistochemistry assays. NSJ Bioreagents offers a validated ARPC1B antibody suitable for various research applications, ensuring specificity and reproducibility in experimental workflows.

Application Notes

Optimal dilution of the ARPC1B antibody should be determined by the researcher.

Immunogen

Amino acids Q293-K372 from the human protein were used as the immunogen for the ARPC1B antibody.

Storage

Store the ARPC1B antibody at -20oC.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com