

ARL8B Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP5887c**Specification**

ARL8B Antibody (Center) Blocking peptide - Product Information

Primary Accession [O9NVJ2](#)
Other Accession [NP_060654.1](#)

ARL8B Antibody (Center) Blocking peptide - Additional Information

Gene ID 55207

Other Names

ADP-ribosylation factor-like protein 8B, ADP-ribosylation factor-like protein 10C, Novel small G protein indispensable for equal chromosome segregation 1, ARL8B, ARL10C, GIE1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ARL8B Antibody (Center) Blocking peptide - Protein Information

Name ARL8B ([HGNC:25564](#))

Synonyms ARL10C, GIE1

Function

Small GTPase which cycles between active GTP-bound and inactive GDP-bound states (PubMed:15331635, PubMed:16537643). In its active state, binds to a variety of effector proteins playing a key role in the regulation of lysosomal positioning which is important for nutrient sensing, natural killer cell-mediated cytotoxicity and antigen presentation. Along with its effectors, orchestrates lysosomal transport and fusion (PubMed:16650381, PubMed:16537643, PubMed:28325809, PubMed:25898167, PubMed:27808481). Localizes specifically to lysosomal membranes and mediates anterograde lysosomal motility by recruiting PLEKHM2, which in turn recruits the motor protein kinesin-1 on lysosomes. Required for lysosomal and cytolytic granule exocytosis (PubMed:<a

[22172677](http://www.uniprot.org/citations/22172677), PubMed:[29592961](http://www.uniprot.org/citations/29592961), PubMed:[24088571](http://www.uniprot.org/citations/24088571)). Critical factor involved in NK cell-mediated cytotoxicity. Drives the polarization of cytolytic granules and microtubule-organizing centers (MTOCs) toward the immune synapse between effector NK lymphocytes and target cells (PubMed:[24088571](http://www.uniprot.org/citations/24088571)). In neurons, mediates the anterograde axonal long-range transport of presynaptic lysosome-related vesicles required for presynaptic biogenesis and synaptic function (By similarity). Also acts as a regulator of endosome to lysosome trafficking pathways of special significance for host defense (PubMed:[21802320](http://www.uniprot.org/citations/21802320)). Regulates cargo trafficking to lysosomes by binding to PLEKHM1 and recruiting the HOPS subunit VPS41, resulting in functional assembly of the HOPS complex on lysosomal membranes (PubMed:[16537643](http://www.uniprot.org/citations/16537643), PubMed:[25908847](http://www.uniprot.org/citations/25908847)). Plays an important role in cargo delivery to lysosomes for antigen presentation and microbial killing. Directs the intersection of CD1d with lipid antigens in lysosomes, and plays a role in intersecting phagosomes with lysosomes to generate phagolysosomes that kill microbes (PubMed:[25908847](http://www.uniprot.org/citations/25908847), PubMed:[21802320](http://www.uniprot.org/citations/21802320)). Involved in the process of MHC II presentation. Regulates the delivery of antigens to lysosomes and the formation of MHC II-peptide complexes through the recruitment of the HOPS complex to lysosomes allowing the fusion of late endosomes to lysosomes (By similarity). May play a role in chromosome segregation (PubMed:[15331635](http://www.uniprot.org/citations/15331635)).

Cellular Location

Late endosome membrane. Lysosome membrane. Cytoplasm, cytoskeleton, spindle. Cell projection, axon {ECO:0000250|UniProtKB:Q9CQW2}. Synapse {ECO:0000250|UniProtKB:Q9CQW2} Cytolytic granule membrane. Note=GTP- bound form resides on lysosomal membranes, whereas GDP-bound form is likely associated with microtubular structures (PubMed:16650381) Localizes with microtubules at the spindle mid-zone during mitosis. In dendritic cells, localizes to MHC II+ compartments (By similarity) {ECO:0000250|UniProtKB:Q9CQW2, ECO:0000269|PubMed:15331635, ECO:0000269|PubMed:16650381}

Tissue Location

Ubiquitously expressed.

ARL8B Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

ARL8B Antibody (Center) Blocking peptide - Images