

## Rabbit Anti-ARL6 antibody

SL10561R

<b>Product Name</b>	ARL6
<b>Chinese Name</b>	二磷酸腺苷核糖基化因子 6 相互作用蛋白抗体
<b>Alias</b>	ADP ribosylation factor like 6; ADP ribosylation factor like protein 6; ADP-ribosylation factor-like protein 6; Arl6; ARL6_HUMAN; Bardet Biedl syndrome 3 protein; Bardet-Biedl syndrome 3 protein; BBS3; MGC32934.
<b>Research Area</b>	Cell biology Signal transduction Apoptosis G protein signal
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human(predicted:Mouse,Rat,Horse) IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Theoretical molecular weight</b>	20kDa
<b>Cellular localization</b>	cytoplasmic The cell membrane
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human ARL6: 31-120/186
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Buffer Solution</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
<b>Attention</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>PubMed</b>	<a href="#">PubMed</a>
<b>Product Detail</b>	The protein encoded by this gene belongs to the ARF family of GTP-binding proteins. ARF proteins are important regulators of cellular traffic and are the

founding members of an expanding family of homologous proteins and genomic sequences. They depart from other small GTP-binding proteins by a unique structural device that implements front-back communication from the N-terminus to the nucleotide-binding site. Studies of the mouse ortholog of this protein suggest an involvement in protein transport, membrane trafficking, or cell signaling during hematopoietic maturation. Alternative splicing occurs at this locus and two transcript variants encoding the same protein have been described. [provided by RefSeq, Jul 2008].

**Function:**

Involved in membrane protein trafficking at the base of the ciliary organelle. Mediates recruitment onto plasma membrane of the BBSome complex which would constitute a coat complex required for sorting of specific membrane proteins to the primary cilia. May regulate cilia assembly and disassembly and subsequent ciliary signaling events such as the Wnt signaling cascade. Isoform 2 may be required for proper retinal function and organization.

**Subunit:**

Interacts with SEC61B, ARL6IP1, ARL6IP2, ARL6IP3, ARL6IP4 ARL6IP5 and ARL6IP6. Interacts (GTP-bound form) with the BBSome a complex that contains BBS1, BBS2, BBS4, BBS5, BBS7, BBS8, BBS9 and BBIP10.

**Subcellular Location:**

Cell projection, cilium membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton, cilium axoneme. Cytoplasm, cytoskeleton, cilium basal body. Note=Appears in a pattern of punctae flanking the microtubule axoneme that likely correspond to small membrane-associated patches. Localizes to the so-called ciliary gate where vesicles carrying ciliary cargo fuse with the membrane.

**DISEASE:**

Defects in ARL6 are a cause of Bardet-Biedl syndrome type 3 (BBS3) [MIM:209900]. Bardet-Biedl syndrome (BBS) is a genetically heterogeneous disorder characterized by usually severe pigmentary retinopathy, early onset obesity, polydactyly, hypogenitalism, renal malformation and mental retardation. Secondary features include diabetes mellitus, hypertension and congenital heart disease.

Defects in ARL6 are the cause of retinitis pigmentosa type 55 (RP55) [MIM:613575]. RP55 is a retinal dystrophy belonging to the group of pigmentary retinopathies. Retinitis pigmentosa is characterized by retinal pigment deposits visible on fundus examination and primary loss of rod photoreceptor cells followed by secondary loss of cone photoreceptors. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field

and eventually central vision as well.

**Similarity:**

Belongs to the small GTPase superfamily. Arf family.

**SWISS:**

Q9H0F7

**Gene ID:**

84100

**Database links:**

[Entrez Gene: 84100](#) Human

[Omir: 608845](#) Human

[SwissProt: Q9H0F7](#) Human

[Unigene: 373801](#) Human