



## Arl1 (yN-19): sc-25194

### BACKGROUND

ADP-ribosylation factors (ARFs) are highly conserved guanine nucleotide-binding proteins that enhance the ADP-ribosyltransferase activity of cholera toxin. ARFs may also participate in vesicular transport in both exocytic and endocytic pathways. Arl1 is a member of the ARF-like protein (ARL) subfamily of small GTPases. On subcellular fractionation, Arl1, similar to ARF1, localizes to the soluble fraction. Arl1 associates with the trans side of the Golgi apparatus, where it aids in the regulation of membrane traffic as well as the structure and function of the Golgi apparatus. In addition, the yeast Arl1 gene plays an important role in the formation of central vacuoles and in the progression of programmed cell death induced by cell-cycle arrest or Bax.

### REFERENCES

1. Lowe, S.L., Wong, S.H., and Hong, W. 1996. The mammalian ARF-like protein 1 (Arl1) is associated with the Golgi complex. *J. Cell Sci.* 109: 209-220.
2. Lee, F.J., Huang, C.F., Yu, W.L., Buu, L.M., Lin, C.Y., Huang, M.C., Moss, J., and Vaughan, M. 1997. Characterization of an ADP-ribosylation factor-like 1 protein in *Saccharomyces cerevisiae*. *J. Biol. Chem.* 272: 30998-31005.
3. Lu, L., et al. 2001. Regulation of Golgi structure and function by ARF-like protein 1 (Arl1). *J. Cell Sci.* 114: 4543-4555.
4. Rosenwald, A.G., et al. 2002. Arl1 and membrane traffic in *Saccharomyces cerevisiae*. *Yeast* 19: 1039-1056.
5. Abudugupur, A., Mitsui, K., Yokota, S., and Tsurugi, K. 2002. An Arl1 mutation affected autophagic cell death in yeast, causing a defect in central vacuole formation. *Cell Death Differ.* 9: 158-168.

### SOURCE

Arl1 (yN-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Arl1 of *Saccharomyces cerevisiae* origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-25194 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

### APPLICATIONS

Arl1 (yN-19) is recommended for detection of Arl1 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.