

## BFA (aN-16): sc-27158

### BACKGROUND

Similar to animals, biosynthetic sterol transport in *Arabidopsis* occurs from the endoplasmic reticulum (ER) via the Golgi apparatus to the plasma membrane. The vesicle trafficking inhibitor brefeldin A (BFA) may disrupt biosynthetic sterol transport at the Golgi level. Inhibition of secGFP transport between the ER and plasma membrane, either by BFA treatment or by genetic intervention results in increased intracellular secGFP accumulation accompanied by an increase in secGFP fluorescence intensity. BFA causes coaccumulation of sterols and endocytic markers like ARA6-GFP and PIN2.

### REFERENCES

1. Grebe, M., Xu, J., Möbius, W., Ueda, T., Nakano, A., Geuze, H.J., Rook, M.B. and Scheres, B. 2003. *Arabidopsis* sterol endocytosis involves actin-mediated trafficking via ARA6-positive early endosomes. *Curr. Biol.* 13: 1378-1387.
2. Zheng, H., Kunst, L., Hawes, C. and Moore, I. 2004. A GFP-based assay reveals a role for RHD3 in transport between the endoplasmic reticulum and Golgi apparatus. *Plant J.* 37: 398-414.

### SOURCE

BFA (aN-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Brefeldin A of *Arabidopsis thaliana* origin (Accession/GI: 7484827).

### 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-27158 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

BFA (aN-16) is recommended for detection of Brefeldin A of *Arabidopsis thaliana* origin by Western blotting (starting dilution: 1:200, dilution range: 1:100-1:1000).

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: bovine anti-goat IgG-HRP: sc-2350 or bovine anti-goat IgG-AP: sc-2351 (dilution range: 1:2000-1:10000), Cruz Marker™ compatible bovine anti-goat IgG-HRP: sc-2378 or bovine anti-goat IgG-AP: sc-2381 (dilution range: 1:2000-1:5000).

### STORAGE

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

### PROTOCOLS

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

### RESEARCH USE

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