

# golgin 45 (A-23): sc-101965

## BACKGROUND

Golgin 45, also known as JEM-1 or basic leucine-zipper nuclear factor 1, is a 400 amino acid protein that localizes to the lumen of the Golgi apparatus. The primary function of golgin 45 is to maintain normal Golgi structure and to facilitate protein transport from the endoplasmic reticulum to the cell surface. The latter process is regulated primarily through the interaction of golgin 45 and GRASP55, which together form a Rab 2 effector complex. Excluding formation of a Rab 2 complex, golgin 45 does not interact with any other Golgi Rab proteins. Golgin 45 is expressed as two isoforms, one of which localizes to the nucleus and is thought to function as a transcription factor.

## REFERENCES

- Duprez, E., Tong, J.H., Derre, J., Chen, S.J., Berger, R., Chen, Z. and Lanotte, M. 1997. JEM-1, a novel gene encoding a leucine-zipper nuclear factor upregulated during retinoid-induced maturation of NB4 promyelocytic leukaemia. *Oncogene* 14: 1563-1570.
- Tong, J.H., Fant, X., Duprez, E., Benoit, G., Uphoff, C.C., Drexler, H.G., Pla, J.C., Lofvenberg, E. and Lanotte, M. 1998. Expression patterns of the JEM-1 gene in normal and tumor cells: ubiquity contrasting with a faint, but retinoid-induced, mRNA expression in promyelocytic NB4 cells. *Leukemia* 12: 1733-1740.

## CHROMOSOMAL LOCATION

Genetic locus: BLZF1 (human) mapping to 1q24.2; Blzf1 (mouse) mapping to 1 H2.2.

## SOURCE

golgin 45 (A-23) is a purified rabbit polyclonal antibody raised against golgin 45 of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

golgin 45 (A-23) is recommended for detection of golgin 45 of mouse, rat, human and dog origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for golgin 45 siRNA (h): sc-88282, golgin 45 siRNA (m): sc-145669, golgin 45 shRNA Plasmid (h): sc-88282-SH, golgin 45 shRNA Plasmid (m): sc-145669-SH, golgin 45 shRNA (h) Lentiviral Particles: sc-88282-V and golgin 45 shRNA (m) Lentiviral Particles: sc-145669-V.

Molecular Weight of golgin 45 isoform 1: 45 kDa.

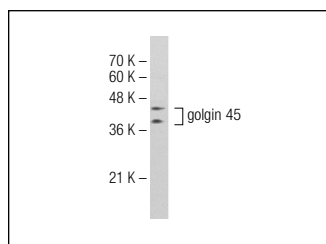
Molecular Weight of golgin 45 isoform 2: 23 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

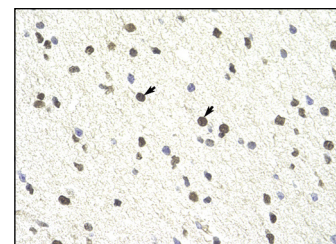
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



golgin 45 (A-23): sc-101965. Western blot analysis of golgin 45 expression in Jurkat whole cell lysate.



golgin 45 (A-23): sc-101965. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing nuclear staining.

## 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.

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Satisfaction  
Guaranteed

Try **golgin 45 (E-3): sc-515193**, our highly recommended monoclonal alternative to golgin 45 (A-23).