

Giantin

Cat.No. 263 003BT; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen, biotin-labeled. . Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: not tested yet ICC: 1 : 500 IHC: not tested yet IHC-P/FFPE: not tested yet
Label	biotin
Immunogen	Recombinant protein corresponding to AA 1 to 427 from rat Giantin (UniProt Id: G3V6A8)
Reactivity	Reacts with: rat, mouse. No signal: zebrafish. Other species not tested yet.
Specificity	Specific for giantin

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

In eukaryotic cells the Golgi complex consists of stacked cisternae. **Giantin**, also referred to as **macroglgin** or **p400**, is a single pass membrane protein involved in tethering these cisternae by cross-bridge formation. Its large cytoplasmic N-terminus is involved in the docking of COPI vesicles via p115 to the Golgi membrane.

Systemic lupus erythematosus and Sjögren's syndrome correlate with autoimmune antibodies against Golgi-compartment proteins with giantin being the most common autoantigen.

Selected General References

Giantin interacts with both the small GTPase Rab6 and Rab1.
Rosing M, Ossendorf E, Rak A, Barnekow A
Experimental cell research (2007) 313(11): 2318-25.

Giantin is the major Golgi autoantigen in human anti-Golgi complex sera.
Nozawa K, Fritzler MJ, von Mühlen CA, Chan EK
Arthritis research & therapy (2004) 6(2): R95-102.

The p115-interactive proteins GM130 and giantin participate in endoplasmic reticulum-Golgi traffic.
Alvarez C, Garcia-Mata R, Hauri HP, Sztul E
The Journal of biological chemistry (2001) 276(4): 2693-700.

A role for giantin in docking COPI vesicles to Golgi membranes.
Sönnichsen B, Lowe M, Levine T, Jämsä E, Dirac-Svejstrup B, Warren G
The Journal of cell biology (1998) 140(5): 1013-21.

Molecular genetic analyses of a 376-kilodalton Golgi complex membrane protein (giantin)
Seelig HP, Schranz P, Schröter H, Wiemann C, Griffiths G, Renz M
Molecular and cellular biology (1994) 14(4): 2564-76.

Giantin, a novel conserved Golgi membrane protein containing a cytoplasmic domain of at least 350 kDa.
Linstedt AD, Hauri HP
Molecular biology of the cell (1993) 4(7): 679-93.