

Datasheet: AHP500G

Description:	SHEEP ANTI HUMAN TGN46
Specificity:	TGN46
Other names:	TGOLN2
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	25 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen (1)	■			0.1µg/ml - 1µg/ml
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting	■			0.1µg/ml - 1µg/ml
Immunofluorescence	■			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) Fixation with 3% paraformaldehyde or methanol/acetone is recommended.

Target Species	Human
Species Cross Reactivity	Reacts with: Primate N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Antiserum Preparation	Antisera to human TGN46 were raised by repeated immunisation of sheep with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 0.5% Bovine Serum Albumin 25% Glycerol
Approx. Protein Concentrations	IgG concentration 0.25 mg/ml

Immunogen	Recombinant human TGN46.
External Database Links	UniProt: O43493 Related reagents Entrez Gene: 10618 TGOLN2 Related reagents
Synonyms	TGN46, TGN51
Specificity	<p>Sheep anti Human TGN46 antibody recognizes Trans-Golgi network integral membrane protein 2 (TGOLN2), also known as TGN38 homolog, TGN46, TGN48 or Trans-Golgi network protein TGN51. TGN46 is a 437 amino acid glycoprotein localized to the Trans-Golgi network. TGN46 has been reported as being the best available marker for human trans-Golgi network.</p> <p>TGN46 is a heavily glycosylated protein of around 110-120 kDa. Multiple isoforms of TGN46 are generated by alternative splicing differing in sequence at the C-terminal portion. Sheep anti Human TGN46 antibody is expected to recognize all identified isoforms.</p>
References	<ol style="list-style-type: none"> 1. Prescott AR <i>et al.</i> (1997) Distinct compartmentalization of TGN46 and beta 1,4-galactosyltransferase in HeLa cells. <i>Eur J Cell Biol.</i> 72 (3): 238-46. 2. Vuillier, F. <i>et al.</i> (2005) Lower levels of surface B-cell-receptor expression in chronic lymphocytic leukemia are associated with glycosylation and folding defects of the mu and CD79a chains. <i>Blood.</i> 105 (7): 2933-40. 3. Edwards, T.L. <i>et al.</i> (2009) Endogenous spartan (SPG20) is recruited to endosomes and lipid droplets and interacts with the ubiquitin E3 ligases AIP4 and AIP5. <i>Biochem. J.</i> 423: 31-39. 4. Roberts, R.C. <i>et al.</i> (2010) Mistargeting of SH3TC2 away from the recycling endosome causes Charcot-Marie-Tooth disease type 4C. <i>Hum Mol Genet.</i> 19: 1009-18. 5. Hauser, H. <i>et al.</i> (2010) HIV-1 Vpu and HIV-2 Env counteract BST-2/tetherin by sequestration in a perinuclear compartment. <i>Retrovirology.</i> 7: 51. 6. Oliver, S.L. <i>et al.</i> (2011) Mutagenesis of varicella-zoster virus glycoprotein I (gI) identifies a cysteine residue critical for gE/gI heterodimer formation, gI structure, and virulence in skin cells. <i>J Virol.</i> 85 (9): 4095-110. 7. Berarducci, B. <i>et al.</i> (2006) Essential functions of the unique N-terminal region of the varicella-zoster virus glycoprotein E ectodomain in viral replication and in the pathogenesis of skin infection. <i>J Virol.</i> 80: 9481-96. 8. Sadaoka, T. <i>et al.</i> (2010) Characterization of the varicella-zoster virus ORF50 gene, which encodes glycoprotein M. <i>J Virol.</i> 84: 3488-502. 9. Vleck, S.E. <i>et al.</i> (2010) Anti-glycoprotein H antibody impairs the pathogenicity of varicella-zoster virus in skin xenografts in the SCID mouse model. <i>J Virol.</i> 84: 141-52. 10. Esk, C. <i>et al.</i> (2010) The clathrin heavy chain isoform CHC22 functions in a novel endosomal sorting step. <i>J Cell Biol.</i> 188: 131-44. 11. Cheng, S.B. <i>et al.</i> (2011) Down-modulation of the G-protein-coupled Estrogen Receptor, GPER, from the Cell Surface Occurs via a trans-Golgi-Proteasome Pathway. <i>J Biol Chem.</i> 286: 22441-55. 12. Fairn, G.D. <i>et al.</i> (2011) High-resolution mapping reveals topologically distinct cellular pools of phosphatidylserine. <i>J Cell Biol.</i> 194 (2): 257-75. 13. Kawabata, A. <i>et al.</i> (2011) Analysis of a Neutralizing Antibody for Human Herpesvirus 6B Reveals a Role for Glycoprotein Q1 in Viral Entry. <i>J Virol.</i> 85: 12962-71. 14. Cornfine, S. <i>et al.</i> (2011) The kinesin KIF9 and reggie/flotillin proteins regulate matrix degradation by macrophage podosomes. <i>Mol Biol Cell.</i> 22: 202-15. 15. Luo, S. <i>et al.</i> (2015) Contribution of N-linked glycans on HSV-2 gB to cell-cell fusion and viral

- entry. *Virology*. 483: 72-82.
16. El Kasmi, I. & Lippé, R. (2015) Herpes simplex virus 1 gN partners with gM to modulate the viral fusion machinery. *J Virol*. 89 (4): 2313-23.
17. Chia, R. et al. (2014) Phosphorylation of LRRK2 by casein kinase 1 α regulates trans-Golgi clustering via differential interaction with ARHGEF7. *Nat Commun*. 5: 5827.
18. Vorobyeva, A.G. et al. (2014) Cyclopamine modulates γ -secretase-mediated cleavage of amyloid precursor protein by altering its subcellular trafficking and lysosomal degradation. *J Biol Chem*. 289 (48): 33258-74.
19. Wang Z et al. (2014) A newly identified myomegalin isoform functions in Golgi microtubule organization and ER-Golgi transport. *J Cell Sci*. 127 (22): 4904-17.
20. Ikawa Y et al. (2015) *In vitro* functional correction of Hermansky-Pudlak Syndrome type-1 by lentiviral-mediated gene transfer. *Mol Genet Metab*. 114 (1): 62-5.
21. Ioannou, M.S. et al. (2015) DENND2B activates Rab13 at the leading edge of migrating cells and promotes metastatic behavior. *J Cell Biol*. 208 (5): 629-48.
22. Gottschalk, E.Y. & Meneses, P.I. (2015) A Dual Role for the Nonreceptor Tyrosine Kinase Pyk2 during the Intracellular Trafficking of Human Papillomavirus 16. *J Virol*. 89 (17): 9103-14.
23. Crevenna, A.H. et al. (2016) Secretory cargo sorting by Ca2+-dependent Cab45 oligomerization at the trans-Golgi network. *J Cell Biol*. 213 (3): 305-14.
24. Matrone, C. et al. (2016) Mannose 6-Phosphate Receptor Is Reduced in -Synuclein Overexpressing Models of Parkinsons Disease. *PLoS One*. 11 (8): e0160501.
25. Ketteler, R. et al. (2017) Image-based siRNA screen to identify kinases regulating Weibel-Palade body size control using electroporation. *Sci Data*. 4: 170022.
26. Lukhele, S. & Cohen É.A. (2017) Conserved residues within the HIV-1 Vpu transmembrane-proximal hinge region modulate BST2 binding and antagonism. *Retrovirology*. 14 (1): 18.
27. Haugsten, E.M. et al. (2016) Proximity Labeling Reveals Molecular Determinants of FGFR4 Endosomal Transport. *J Proteome Res*. 15 (10): 3841-55.
28. Paquin, N. et al. (2016) The Conserved VPS-50 Protein Functions in Dense-Core Vesicle Maturation and Acidification and Controls Animal Behavior. *Curr Biol*. 26 (7): 862-71.
29. Sugden, S.M. et al. (2017) HIV-1 Vpu Downmodulates ICAM-1 Expression, Resulting in Decreased Killing of Infected CD4 $^{+}$ T Cells by NK Cells. *J Virol*. 91 (8): pii: e02442-16.
30. DiGiuseppe, S. et al. (2015) Topography of the Human Papillomavirus Minor Capsid Protein L2 during Vesicular Trafficking of Infectious Entry. *J Virol*. 89 (20): 10442-52.
31. Cabukusta, B. et al. (2017) Ceramide phosphoethanolamine synthase SMSr is a target of Caspase-6 during apoptotic cell death. *Biosci Rep*. Jun 28. pii: BSR20170867 [Epub ahead of print]
32. Luchsinger, C. et al. (2018) Functional disruption of the Golgi apparatus protein ARF1 sensitizes MDA-MB-231 breast cancer cells to the antitumor drugs Actinomycin D and Vinblastine through ERK and AKT signaling. *PLoS One*. 13 (4): e0195401.

Further Reading 1. Ponnambalam, S. et al. (1996) Primate homologues of rat TGN38: primary structure, expression and functional implications. *J Cell Sci*. 109 (Pt 3): 675-85.

Storage Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life 18 months from date of despatch.

Health And Safety Material Safety Datasheet documentation #10048 available at:
10048: <https://www.bio-rad-antibodies.com/uploads/MSDS/10048.pdf>

Information

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Sheep IgG (H/L) (5184-2304...) [Biotin](#)

Donkey Anti Sheep IgG (STAR88...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),
[FITC](#), [HRP](#)

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