

## Datasheet: AHP500GT

<b>Description:</b>	SHEEP ANTI HUMAN TGN46
<b>Specificity:</b>	TGN46
<b>Other names:</b>	TGOLN2
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	10 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen (1)	▪			0.1ug/ml - 1ug/ml
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			0.1ug/ml - 1ug/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.**

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

<b>Immunogen</b>	Recombinant human TGN46.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">O43493</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">10618</a>    TGN46    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	TGN46, TGN51
<b>Specificity</b>	<p><b>Sheep anti Human TGN46 antibody</b> recognizes Trans-Golgi network integral membrane protein 2 (TGN46), 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>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Prescott AR <i>et al.</i> (1997) Distinct compartmentalization of TGN46 and beta 1,4-galactosyltransferase in HeLa cells. <a href="#">Eur J Cell Biol. 72 (3): 238-46.</a></li> <li>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. <a href="#">Blood. 105 (7): 2933-40.</a></li> <li>3. Edwards, T.L. <i>et al.</i> (2009) Endogenous spartin (SPG20) is recruited to endosomes and lipid droplets and interacts with the ubiquitin E3 ligases AIP4 and AIP5. <a href="#">Biochem. J. 423: 31-39.</a></li> <li>4. Roberts, R.C. <i>et al.</i> (2010) Mistargeting of SH3TC2 away from the recycling endosome causes Charcot-Marie-Tooth disease type 4C. <a href="#">Hum Mol Genet. 19: 1009-18.</a></li> <li>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. <a href="#">Retrovirology. 7: 51.</a></li> <li>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. <a href="#">J Virol. 85 (9): 4095-110.</a></li> <li>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. <a href="#">J Virol. 80: 9481-96.</a></li> <li>8. Sadaoka, T. <i>et al.</i> (2010) Characterization of the varicella-zoster virus ORF50 gene, which encodes glycoprotein M. <a href="#">J Virol. 84: 3488-502.</a></li> <li>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. <a href="#">J Virol. 84: 141-52.</a></li> <li>10. Esk, C. <i>et al.</i> (2010) The clathrin heavy chain isoform CHC22 functions in a novel endosomal sorting step. <a href="#">J Cell Biol. 188: 131-44.</a></li> <li>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. <a href="#">J Biol Chem. 286: 22441-55.</a></li> <li>12. Fairn, G.D. <i>et al.</i> (2011) High-resolution mapping reveals topologically distinct cellular pools of phosphatidylserine. <a href="#">J Cell Biol. 194 (2): 257-75.</a></li> <li>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. <a href="#">J Virol. 85: 12962-71.</a></li> <li>14. Cornfine, S. <i>et al.</i> (2011) The kinesin KIF9 and reggie/flotillin proteins regulate matrix degradation by macrophage podosomes. <a href="#">Mol Biol Cell. 22: 202-15.</a></li> <li>15. Luo, S. <i>et al.</i> (2015) Contribution of N-linked glycans on HSV-2 gB to cell-cell fusion and viral</li> </ol>

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**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.](#)

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**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.

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**Shelf Life** 18 months from date of despatch.

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

## Information

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**Regulatory** For research purposes only

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## 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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