

Datasheet: AHP499

Description:	SHEEP ANTI RAT TGN38		
Specificity:	TGN38		
Format:	Serum		
Product Type:	Polyclonal Antibody		
lsotype:	Polyclonal IgG		
Quantity:	0.1 ml		

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 <u>www.bio-</u>			
	rad-antibodies.com/protocols.										
		Yes	No	Not Determined	Suggested Dilution						
		Flow Cytometry			•						
	Immunohistology - Frozen	•			1/100 - 1/200						
	Immunohistology - Paraffin			•							
	ELISA			•							
	Immunoprecipitation			•							
	Western Blotting	-			1/1000						
	Immunofluorescence										
	Immuno-electron										
	Microscopy										
	Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.										
							Target Species	Rat			
Species Cross							Reacts with: Mouse				
Reactivity	N.B. Antibody reactivity and working conditions may vary between species. Cross										
	reactivity is derived from testing within our laboratories, peer-reviewed publications or										
	personal communications from the originators. Please refer to references indicated for										
	further information.		e engineri								
Product Form	serum diluted - liquid										
Antiserum Prepara	ation Antisera to TGN38 were	raised h	/ reneated	limmunisations of she	en with highly purified						

Antiserum Preparation Antisera to TGN38 were raised by repeated immunisations of sheep with highly purified antigen.

	Phosphate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃) 25% Glycerol 1% Bovine Serum Albumin
Immunogen	Recombinant fusion protein corresponding to extracellular domain of TGN38.
External Database Links	UniProt: P19814 Related reagents Entrez Gene: 192152 Tgoln1 Related reagents
RRID	AB_2287346
Specificity	Sheep anti Rat TGN38 antibody recognizes rat TGN38, a 357 amino acid single pass trans membrane glycoprotein found primarily in the trans-golgi network, and acts as an excellent marker for this cellular organelle (<u>Humphrey <i>et al.</i> 1993</u>).
	TGN38 is likely to have a role in intracellular transport (<u>McNamara <i>et al.</i> 2004</u>) and plays a role in morphological maintenance (<u>Girotti and Banting 1996</u>). It is the homologue of human TGN46 and macaque TGN47 (<u>Ponnambalam <i>et al.</i> 1996</u>).
Immunohistology	Fixation with methanol or methanol/acetone recommended.

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11. Han, L. *et al.* (2008) A large form of secretogranin III functions as a sorting receptor for chromogranin A aggregates in PC12 cells. <u>Mol Endocrinol. 22: 1935-49.</u>

12. Probst, O.C. *et al.* (2006) The 46-kDa mannose 6-phosphate receptor does not depend on endosomal acidification for delivery of hydrolases to lysosomes. <u>J Cell Sci. 119</u> (Pt 23): 4935-43.

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14. Hou, J.C. *et al.* (2006) A specific dileucine motif is required for the GGA-dependent entry of newly synthesized insulin-responsive aminopeptidase into the insulin-responsive compartment. J Biol Chem. 281: 33457-66.

15. Fortin, M.E. *et al.* (2006) Modulation of GJA1 turnover and intercellular communication by proinflammatory cytokines in the anterior pituitary folliculostellate cell line TtT/GF. <u>Biol</u> <u>Reprod. 74: 2-12.</u>

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18. Yamamoto, H. *et al.* (2016) Posttranslational processing of FGF23 in osteocytes during the osteoblast to osteocyte transition. <u>Bone. 84: 120-30.</u>

 Koga, D. *et al.* (2015) Correlative Light and Scanning Electron Microscopy for Observing the Three-Dimensional Ultrastructure of Membranous Cell Organelles in Relation to Their Molecular Components. <u>J Histochem Cytochem. 63 (12): 968-79.</u>
 Mukai, K. *et al.* (2016) Activation of STING requires palmitoylation at the Golgi. <u>Nat</u> <u>Commun. 7: 11932.</u>

21. Koga, D. *et al.* (2017) Changes in the three-dimensional ultrastructure of membranous organelles in male rat pituitary gonadotropes after castration. <u>Biomed Res. 38 (1): 1-18.</u>
22. Kusumi, S. *et al.* (2018) Combination of a cryosectioning method and section scanning electron microscopy for immuno-scanning electron microscopy. <u>Biomed Res. 39 (1):</u> 21-25.

23. Mukai, K. *et al.* (2021) Homeostatic regulation of STING by retrograde membrane traffic to the ER. <u>Nat Commun. 12 (1): 61.</u>

24. Caswell, P.T. & Dickens, M. (2018) JIP3 localises to exocytic vesicles and focal adhesions in the growth cones of differentiated PC12 cells. <u>Mol Cell Biochem. 444 (1-2):</u> <u>1-13.</u>

25. Ogawa, E. *et al.* (2018) The binding of TBK1 to STING requires exocytic membrane traffic from the ER. <u>Biochem Biophys Res Commun. 503 (1): 138-145.</u>

26. Sou, Y.S. *et al.* (2019) Cerebellar Neurodegeneration and Neuronal Circuit

Remodeling in Golgi pH Regulator-Deficient Mice. <u>eNeuro. 6(3):ENEURO.0427-18.2019.</u>
27. Koga, D. *et al.* (2021) Applications of Scanning Electron Microscopy Using Secondary

and Backscattered Electron Signals in Neural Structure. <u>Front Neuroanat. 15: 759804.</u> 28. Mukai, K. *et al.* (2021) Homeostatic regulation of STING by retrograde membrane traffic to the ER. <u>Nat Commun. 12 (1): 61.</u>

Further Reading	1. Luzio, J.P. <i>et al.</i> (1990) Identification, sequencing and expression of an integral membrane protein of the trans-Golgi network (TGN38). <u>Biochem J. 270: 97-102.</u>			
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.			
	Avoid repeated freezing and thawing as this may denature the frost-free freezers is not recommended.	antibody. Storage in		
Guarantee	12 months from date of despatch			
Health And Safety Information	Material Safety Datasheet documentation #10048 available at: https://www.bio-rad-antibodies.com/SDS/AHP499 10048			
Regulatory	For research purposes only			

Related Products

Recommended Secondary Antibodies

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

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M429071:240315'

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