

## Datasheet: MCA1571T

<b>Description:</b>	MOUSE ANTI HUMAN THYROID STIMULATING HORMONE RECEPTOR
<b>Specificity:</b>	THYROID STIMULATING HORMONE RECEPTOR
<b>Other names:</b>	THYROTROPIN RECEPTOR
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	4C1
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	20 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	▪			1/100 - 1/1000
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			1/1000 - 1/2000

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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	External domain of human TSH receptor.

### External Database Links

#### UniProt:

[P16473](#)

[Related reagents](#)

**Entrez Gene:**[7253](#) TSHR [Related reagents](#)

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<b>Synonyms</b>	LGR3
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<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the NS1/Ag4.1 myeloma cell line.
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<b>Specificity</b>	<b>Mouse anti Human thyroid stimulating hormone receptor, clone 4C1</b> recognizes the human thyroid stimulating hormone receptor (hTSHR), otherwise known as the thyrotropin receptor. Mouse anti Human thyroid stimulating hormone receptor, clone 4C1 binds to an extracellular domain of hTSHR.
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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<b>Immunohistology</b>	This product does not require protein digestion pre-treatment of paraffin sections. This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.
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<b>Histology Positive Control Tissue</b>	Thyroid gland
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<b>References</b>	<ol style="list-style-type: none"><li>1. Suh, J.M. <i>et al.</i> (2003) Regulation of the phosphatidylinositol 3-kinase, Akt/protein kinase B, FRAP/mammalian target of rapamycin, and ribosomal S6 kinase 1 signaling pathways by thyroid-stimulating hormone (TSH) and stimulating type TSH receptor antibodies in the thyroid gland. <a href="#">J Biol Chem. 278 (24): 21960-71.</a></li><li>2. Kleinau, G. <i>et al.</i> (2011) From Molecular Details of the Interplay between Transmembrane Helices of the Thyrotropin Receptor to General Aspects of Signal Transduction in Family A G-protein-coupled Receptors (GPCRs). <a href="#">J Biol Chem. 286: 25859-71.</a></li><li>3. (0) Human Protein Atlas: CAB000473 Human Protein Atlas: CAB000473</li><li>4. Shepherd PS,<i>et al.</i> (1999) Identification of an important thyrotrophin binding site on the human thyrotrophin receptor using monoclonal antibodies. <a href="#">Mol Cell Endocrinol.149:197-206.</a></li></ol>
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<b>Storage</b>	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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<b>Shelf Life</b>	18 months from date of despatch.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...) [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
 Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#),  
[DyLight@649](#), [DyLight@680](#), [DyLight@800](#),  
[FITC](#), [HRP](#)  
 Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
 Goat Anti Mouse IgG (STAR77...) [HRP](#)  
 Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
 Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
 Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)  
 Goat Anti Mouse IgG (STAR70...) [FITC](#)  
 Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)  
 Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

## Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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