

# Datasheet: MCA1571T

**BATCH NUMBER 1808**

<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

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	External domain of human TSH receptor.
External Database Links	<p><b>UniProt:</b>  <a href="#">P16473</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">7253</a>    TSHR    <a href="#">Related reagents</a></p>
Synonyms	LGR3
RRID	AB_2303782
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the NS1/Ag4.1 myeloma cell line.
Specificity	<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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
Immunohistology	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.
Histology Positive Control Tissue	Thyroid gland
References	<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. 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> <li>4. Oba, J. <i>et al.</i> (2017) Trends in hepatocyte growth factor, insulin-like growth factor 1, thyroid-stimulating hormone, and leptin expression levels in uveal melanoma patient serum and tumor tissues: correlation to disease progression. <a href="#">Melanoma Res. 27 (2): 126-33.</a></li> </ol>

**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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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA1571T>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

### Recommended Negative Controls

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
'M365487:200529'

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