

Datasheet: MCA1571T

Description:	MOUSE ANTI HUMAN THYROID STIMULATING HORMONE RECEPTOR
Specificity:	THYROID STIMULATING HORMONE RECEPTOR
Other names:	THYROTROPIN RECEPTOR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	4C1
Isotype:	IgG2a
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/100 - 1/1000
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			1/1000 - 1/2000

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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)
Carrier Free	Yes
Approx. Protein	IgG concentration 1.0 mg/ml

Concentrations

Immunogen External domain of human TSH receptor.

External Database Links

UniProt:

[P16473](#) [Related reagents](#)

Entrez Gene:

[7253](#) TSHR [Related reagents](#)

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 **Mouse anti Human thyroid stimulating hormone receptor, clone 4C1** 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 10µl of the suggested working dilution to label 10⁶ cells in 100µl

Histology Positive Control Tissue Human thyroid gland

References

1. Suh, J.M. *et al.* (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. [J Biol Chem. 278 \(24\): 21960-71.](#)
 2. Kleinau, G. *et al.* (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). [J Biol Chem. 286: 25859-71.](#)
 3. Shepherd PS, *et al.* (1999) Identification of an important thyrotrophin binding site on the human thyrotrophin receptor using monoclonal antibodies. [Mol Cell Endocrinol. 149:197-206.](#)
 4. Oba, J. *et al.* (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. [Melanoma Res. 27 \(2\): 126-33.](#)
-

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 antibody. Storage in

frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
------------------	---------------------------------

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
--------------------------------------	--

Regulatory	For research purposes only
-------------------	----------------------------

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 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
'M410258:221028'

Printed on 28 Oct 2022