## TSH Receptor, B Chain Monoclonal Mouse Antibody (TSHRB/1405)

## **Product Description**

Thyroid-stimulating hormone (TSH, also known as thyrotropin) is a glycoprotein involved in the control of thyroid structure and metabolism, which stimulates the release of the thyroid hormones. TSH is regulated by thyroid hormone (T3) and various retinoid compounds. TSH binds to the thyroid-stimulating hormone receptor (TSHR), which is cleaved into two subunits, A and B, and plays a major role in regulating thyroid function. The third cytoplasmic loop of TSHR has been identified as critical for its role in regulating inositol phosphate and cAMP formation. In Grave s disease, an autoimmune disorder, TSHR is activated by autoantibodies, which may be stimulated by the cleavage of the A and B subunits.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1405, Anti-TSH Receptor, B Chain (TSHRB/1405)

Product attributes				
Antibody number	#1405			
Antibody reactivity (target)	TSH Receptor, B Chain			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	TSHRB/1405			
Isotype	lgG2a			
Molecular weight	42 kDa			
Synonyms	CHNG1; hTSHRI; LGR3; Thyroid-stimulating hormone receptor Thyrotropin receptor; Thyrotropin receptor I; TSHR			
Human gene symbol	TSHR			
Entrez gene ID	7253			
SwissProt	P16473			
Unigene	160411			
Immunogen	B-Chain protein, Recombinant human TSHR			
Antibody target cellular localization	Plasma membrane			
Verified antibody applications	IHC (FFPE) (verified)			
Species reactivity	Human			
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Immunohistology (formalin) 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris buffer with 1 mM EDTA pH 8.0 for 10-20 min followed by cooling at RT for 20 min, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user			
Positive control	293T Cells. Thyroid gland			
Shipping condition	Room temperature			
Storage Conditions	store at 2 to 8 °C, Protect fluorescent conjugates from light, lote: store BSA-free antibodies at -10 to -35 °C			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	ate Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL			

PBS without azide

Endocrinology

Antibody research areas

Cell/tissue expression

Product origin

in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in

Product may contain either bovine serum albumin (BSA) from

bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Call us: 800-304-5357 Email: btinfo@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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This datasheet was generated on November 3, 2025 at 12:15:01 PM. Visit product page to check for updated information before use. Product link: https://biotium.com/product/mouse-monoclonal-anti-tsh-receptor-b-chain-tshrb1405/