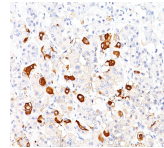


Thyroid Stimulating Hormone, beta Monoclonal Mouse Antibody (TSHb/1317)



Product Description

The four human glycoprotein hormones chorionic gonadotropin (CG), luteinizing hormone (LH) follicle stimulating hormone (FSH), and thyroid stimulating hormone (TSH) are dimers consisting of alpha and beta subunits that are associated non-covalently. The alpha subunits of these hormones are identical, however, their beta chains are unique and confer biological specificity. TSH is synthesized and secreted by thyrotrope cells in the anterior pituitary gland which regulates the endocrine function of the thyroid gland. TSH stimulates the thyroid gland to secrete the hormones thyroxine (T4) and triiodothyronine (T3). TSH production is controlled by a Thyrotropin-Releasing Hormone (TRH), which is manufactured in the hypothalamus and transported to the pituitary gland, where it increases TSH production and release. Somatostatin is also produced by the hypothalamus and has an opposite effect on the pituitary production of TSH, decreasing or inhibiting its release. TSH is a useful marker in classification of pituitary tumors and the study of pituitary disease.

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.

Product attributes

Antibody number	#1317
Antibody reactivity (target)	Thyroid Stimulating Hormone, beta
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	TSHb/1317
Isotype	IgG1, kappa
Molecular weight	16 kDa
Synonyms	CHNG4; Thyroid stimulating hormone beta subunit; Thyroid stimulating hormone; beta precursor; Thyrotropin beta subunit; TSHB
Human gene symbol	TSHB
Entrez gene ID	7252
SwissProt	P01222
Unigene	406687
Immunogen	Recombinant human TSH beta fragment
Verified antibody applications	IHC (FFPE) (verified)
Antibody target cellular localization	Cytoplasmic
Species reactivity	Human
Positive control	Normal pituitary or its tumor.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	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 in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Tumor expression	Thyroid cancer

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
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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