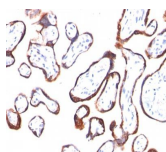


# HCG Beta Monoclonal Mouse Antibody (HCGb/54)



## Product Description

This MAb reacts with a protein of 22 kDa, identified as  $\beta$  sub-unit of HCG. It does not cross react with the  $\alpha$  sub-unit. HCG is a glycoprotein, which is secreted in large quantities by normal trophoblasts. It is present only in trace amounts in non-pregnant urine and sera but rises sharply during pregnancy. HCG is composed of two non-identical, non-covalently linked polypeptide chains designated as the alpha and beta subunits. The alpha subunit is identical to that of thyroid stimulating hormone (TSH), follicle stimulating hormone (FSH), and luteinizing hormone (LH). hCG MAb detects cells and tumors of trophoblastic origin such as choriocarcinoma. Large cell carcinoma and adenocarcinoma of the lung demonstrate anti-hCG positivity in 90% and 60% of cases respectively. 20% of lung squamous cell carcinomas are positive. hCG expression by non-trophoblastic tumors may indicate aggressive behavior.

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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0054, Anti-HCG Beta (HCGb/54)**

## Product attributes

Antibody number	#0054
Antibody reactivity (target)	HCG Beta
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	HCGb/54
Isotype	IgG1, kappa
Molecular weight	22 kDa
Synonyms	CG-beta; CGB3; CGB5; CGB7; CGB8; Choriongonadotropin Subunit beta; hCGB
Human gene symbol	CGB3
Entrez gene ID	1082
SwissProt	P01233
Unigene	172944
Immunogen	Recombinant hCG beta protein
Antibody target cellular localization	Secreted (extracellular), Vesicular
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. Immunohistology formalin-fixed 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined by user
Positive control	JAR or TT Cells. Placenta
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
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	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
Antibody research areas	Endocrinology
Product origin	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.
Cell/tissue expression	Placenta

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

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

This datasheet was generated on July 12, 2025 at 02:35:17 AM. Visit product page to check for updated information before use.  
Product link: <https://biotium.com/product/monoclonal-anti-hcg-beta-hcgb54/>