## HCG Beta Recombinant Monoclonal Mouse Antibody (rHCGb/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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2197, Anti-HCG Beta (rHCGb/54)

## Product attributes

Product attributes			
Antibody number	#2197		
Antibody reactivity (target)	HCG Beta		
Antibody type	Primary		
Host species	Mouse		
Clonality	Recombinant Monoclonal		
Clone	rHCGb/54		
Isotype	IgG1, kappa		
Molecular weight	22 kDa		
Synonyms	CG-beta; CGB3; CGB5; CGB7; CGB8; Choriogonadotropin Subunit beta; hCGB		
Human gene symbol	CGB3		
Entrez gene ID	1082		
SwissProt	P01233		
Unigene	172944		
Immunogen	Recombinant full-length human hCG beta protein		
Antibody target cellular localization	Secreted (extracellular), Vesicular		
Verified antibody applications	IHC (FFPE) (verified)		
Species reactivity	Human		
Species reactivity Antibody application notes	Human  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology (formalin): 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 minutes followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user		
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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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