

## Datasheet: 2090-1614

Description:	MOUSE ANTI hCG BETA (FREE SPECIFIC)
Specificity:	hCG BETA (FREE SPECIFIC)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	P1G7F12 (BIO-BCG-005)
lsotype:	lgG1
Quantity:	1 mg

# **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 <u>www.bio-rad-antibodies.com/protocols</u> . Yes No Not Determined Suggested Dilution					
	Radioimmunoassays	-				
	Where this product has not	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 the approp				stem using the appropriate	
	negative/positive controls.					
Target Species	Human					
Product Form	Purified IgG - liquid					
Preparation	Purified IgG prepared by affinity chromatography on Protein A					
Buffer Solution	Phosphate buffered saline					
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )					
Carrier Free	Yes					
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml					
Immunogen	Human Chorionic Gonadotropin beta subunit from human pregnancy urine					
External Database Links	UniProt: <u>P01233</u> <u>Related rea</u> Entrez Gene: 1082 CGB Related rea					
		Jugonio				

Synonyms	CGB3
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the P3X63-Ag 8.653 myeloma cell line
Specificity	Mouse anti hCG beta (free specific) antibody, clone P1G7F12 (BIO-BCG-005) recognizes the beta subunit of human chorionic gonadotropin (hCG).
	Minimal cross-reactivity (0.5%) has been observed with the intact hCG molecule and negligible reactivity has been shown with the human luteinizing hormone (LH), follicle-stimulating hormone (FSH) and thyroid-stimulating hormone (TSH).
	Human chorionic gonadotropin exists in 5 different variants (hCG, sulfated hCG, hyperglycosylated hCG, free beta hCG and hyperglycosylated free beta) that share the same amino acid sequence but have different functions ( <u>Cole 2012</u> ). hCG is a glycoprotein of 237 amino acids. Regular hCG has a molecular mass of ~36 kDa where oligosaccharides account for 25-30% of the MW ( <u>Cole 2010</u> ). hCG is composed of a 92-amino acid alpha subunit, common to the LH, FSH and TSH hormones, and of a unique beta subunit, which is recognized by Mouse anti hCG beta antibody, clone P1G7F12.
	Production of progesterone is not the only role of hCG: it also has numerous other functions, during pregnancy and as a marker for certain cancers ( <u>Cole 2012</u> ), ( <u>Cole 2010</u> ) and ( <u>Cole 2009</u> ).
Further Reading	<ol> <li>Cole, L.A. (2009) Human chorionic gonadotropin tests. <u>Expert Rev Mol Diagn. 9:721-47</u></li> <li>Cole, L.A. (2010) Biological functions of hCG and hCG-related molecules. <u>Reprod Biol Endocrinol. 8:102-115.</u></li> <li>Cole, L.A. (2012) hCG, the wonder of today's science. <u>Reprod Biol Endocrinol. 10:24-41</u></li> </ol>
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</u>
Regulatory	For research purposes only

## **Related Products**

### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR76)	<u>RPE</u>			
Goat Anti Mouse IgG IgA IgM (STAR87) Alk. Phos., HRP				
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>			
Goat Anti Mouse IgG (STAR77)	<u>HRP</u>			
Rabbit Anti Mouse IgG (STAR12)	<u>RPE</u>			
Goat Anti Mouse IgG (Fc) (STAR120)	<u>FITC</u> , <u>HRP</u>			
Rabbit Anti Mouse IgG (STAR8)	DyLight®800			

Goat Anti Mouse IgG (STAR70)	<u>FITC</u>
Rabbit Anti Mouse IgG (STAR13)	HRP
Human Anti Mouse IgG1 (HCA036)	HRP
Goat Anti Mouse IgG (H/L) (STAR117)	Alk. Phos., DyLight®488, DyLight®549,
	DyLight®649, DyLight®680, DyLight®800,
	FITC, HRP

### **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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

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