

## Datasheet: 2090-1614

<b>Description:</b>	MOUSE ANTI hCG BETA (FREE SPECIFIC)
<b>Specificity:</b>	hCG BETA (FREE SPECIFIC)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	P1G7F12 (BIO-BCG-005)
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Radioimmunoassays	▪			

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 appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human Chorionic Gonadotropin beta subunit from human pregnancy urine

**External Database  
Links**

**UniProt:**

[P01233](#)    [Related reagents](#)

**Entrez Gene:**

[1082](#)    CGB    [Related reagents](#)

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**Synonyms**

CGB3

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**RRID**

AB\_2078963

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**Fusion Partners**

Spleen cells from immunized BALB/c mice were fused with cells of the P3X63-Ag 8.653 myeloma cell line

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**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 ([Cole 2012](#)). 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 ([Cole 2010](#)). 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 ([Cole 2012](#)), ([Cole 2010](#)) and ([Cole 2009](#)).

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**Further Reading**

1. Cole, L.A. (2009) Human chorionic gonadotropin tests. [Expert Rev Mol Diagn. 9:721-47](#)
2. Cole, L.A. (2010) Biological functions of hCG and hCG-related molecules. [Reprod Biol Endocrinol. 8:102-115.](#)
3. Cole, L.A. (2012) hCG, the wonder of today's science. [Reprod Biol Endocrinol. 10:24-41](#)

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**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/2090-1614>  
10040

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#),  
[DyLight@650](#), [DyLight@680](#), [DyLight@800](#),  
[FITC](#), [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
'M405263:220916'

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