

Datasheet: MCA5830G

Description:	MOUSE ANTI HUMAN GROWTH HORMONE
Specificity:	GROWTH HORMONE
Other names:	SOMATOTROPIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	5B4
Isotype:	IgG2a
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/5000 - 1/50000
Immunoprecipitation			▪	
Western Blotting			▪	

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 appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Does not react with: Bovine, Pig
 Reacts weakly with: Horse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.09% Sodium Azide (NaN₃)

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0mg/ml

External Database Links

UniProt:

[P01241](#) [Related reagents](#)

Entrez Gene:

[2688](#) GH1 [Related reagents](#)

Specificity **Mouse anti hGH, Clone 5B4**, recognises human growth hormone, also known as somatotropin, a polypeptide synthesised by acidophilic or somatotropic cells of the anterior pituitary gland. It exists as several isoforms, including a ~20 kDa and ~22 kDa variant. Growth hormone plays an important role in growth and cell production.

Cross reactivity profile:

Compound	Reactivity
Human growth hormone 22 kDa	100%
Human placental growth hormone	100%
Human growth hormone 20 kDa	50%
Methionyl human growth hormone	0.5%
Growth hormone receptor	0.3%
Human placental lactogen	0.002%
Human thyroid stimulating hormone	0%
Human chorionic gonadotropin	0%
Human luteinizing hormone	0%
Human follicle stimulating hormone	0%
Human prolactin	0%
Horse growth hormone	0.007%
Bovine growth hormone	0%
Pig growth hormone	0%

References

1. Gomez, F. *et al.* (1984) A highly sensitive radioimmunoassay for human growth hormone using a monoclonal antibody. [J Immunoassay. 5:145-57.](#)
2. Hennen, G. *et al.* (1985) A human placental GH: increasing levels during second half of pregnancy with pituitary GH suppression as revealed by monoclonal antibody radioimmunoassays. [Int J Fertil. 30: 27-33.](#)

3. Frankenne, F. *et al.* (1987) [Discovery of a placental variant of human growth hormone: biochemistry, physiology and implication in the secretion of hypophyseal forms]. [Reprod Nutr Dev. 27: 523-4.](#)
4. Frankenne, F. *et al.* (1988) The physiology of growth hormones (GHs) in pregnant women and partial characterization of the placental GH variant. [J Clin Endocrinol Metab. 66: 1171-80.](#)
5. Igout, A. *et al.* (1989) Expression and secretion of the human placental growth hormone in *Escherichia coli*. [Nucleic Acids Res. 17: 3998.](#)
6. Eriksson, L. *et al.* (1989) Growth hormone 24-h serum profiles during pregnancy--lack of pulsatility for the secretion of the placental variant. [Br J Obstet Gynaecol. 96: 949-53.](#)
7. Jara, C.S. *et al.* (1989) Immunocytochemical localization of the human growth hormone variant in the human placenta. [J Clin Endocrinol Metab. 69: 1069-72.](#)
8. Mirlesse, V. *et al.* (1993) Placental growth hormone levels in normal pregnancy and in pregnancies with intrauterine growth retardation. [Pediatr Res. 34: 439-42.](#)
9. Igout, A. *et al.* (1993) Purification and biochemical characterization of recombinant human placental growth hormone produced in *Escherichia coli*. [Biochem J. 295: 719-24.](#)

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA5830G>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
- 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](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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

'M382413:210513'

Printed on 19 Jan 2024

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