

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.
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 (NaN ₃)
Carrier Free	Yes
Approx. Protein	IgG concentration 1.0mg/ml

Concentrations

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 somatotrophic 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	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: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Human Anti Mouse IgG2a (HCA037...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP

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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