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 (NaN_3)
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	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.
Guarantee	12 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 IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Human Anti Mouse IgG2a (HCA037...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®680, DyLight®800, FITC, 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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