

Datasheet: MCA6201B

BATCH NUMBER 100005272

Description:	MOUSE ANTI HUMAN PROLACTIN:Biotin
Specificity:	PROLACTIN
Other names:	PRL
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	C03-3E9
Isotype:	IgG1
Quantity:	0.1 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
ELISA	▪			1.0 ug/ml

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
Product Form	Purified IgG conjugated to Biotin - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	<i>E. coli</i> derived recombinant human prolactin (Leu29-Cys227)

**External Database
Links**

UniProt:

[P01236](#) [Related reagents](#)

Entrez Gene:

[5617](#) PRL [Related reagents](#)

Fusion Partners

Cell fusion between immunized BALB/c mouse spleen cells and mouse myeloma SP2/0

Specificity

Mouse anti Human prolactin antibody, clone C03-3E9, recognizes prolactin a peptide hormone expressed by many cell types including the pituitary gland, decidua, ovary, prostate, mammary gland, adipose tissue, brain and immune cells. Of the immune cells, prolactin is secreted by dendritic cells, thymocytes, T cells, B cells, monocytes and macrophages ([Borba et al. 2018](#)). Prolactin now has a reported >300 separate biological activities, since it was first discovered as a stimulator of crop milk in pigeons and a promotor of lactation in rabbits ([Freeman et al. 2000](#)). In the immune system prolactin acts as a cytokine. In an example, prolactin is able to regulate innate and adaptive immune responses through the maturation of CD4⁻ CD8⁻ thymocytes to CD4⁺ CD8⁺ T cells via IL-2 receptor expression. Prolactin is also able to stimulate the development of antigen presenting cells expressing major histocompatibility complex class II ([Borba et al. 2018](#)). Where patients have an abnormally high level of circulating prolactin (hyperprolactinemia) this can result in the impairment of B cell clonal deletion, deregulation or receptor editing, as well as the diminishment of the threshold for B cell activation, promoting auto-reactivity ([Borba et al. 2018](#)).

The biotinylated Mouse anti Human prolactin antibody, clone C03-3E9 (MCA6201B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human NGAL antibody, clone C01-2B2 ([MCA6200GA](#)) as the capture antibody.

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 #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE ANTI HUMAN PROLACTIN \(MCA6200GA\)](#)

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)

North & South Tel: +1 800 265 7376

America 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

'M378786:210304'

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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