

Datasheet: MCA6201B

**BATCH NUMBER 100005272**

<b>Description:</b>	MOUSE ANTI HUMAN PROLACTIN:Biotin
<b>Specificity:</b>	PROLACTIN
<b>Other names:</b>	PRL
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	C03-3E9
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

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

**External Database  
Links**

**UniProt:**

[P01236](#)   [Related reagents](#)

**Entrez Gene:**

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

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**Fusion Partners**

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

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**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<sup>-</sup> CD8<sup>-</sup> thymocytes to CD4<sup>+</sup> CD8<sup>+</sup> 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.

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10041 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA6201B>  
10041

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Useful Reagents

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

**North & South** Tel: +1 800 265 7376

**Worldwide** Tel: +44 (0)1865 852 700

**Europe** Tel: +49 (0) 89 8090 95 21

**America** Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

To  
find a

batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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