

## Datasheet: MCA2796

<b>Description:</b>	MOUSE ANTI ANTHRAX PROTECTIVE ANTIGEN
<b>Specificity:</b>	ANTHRAX PROTECTIVE ANTIGEN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	C3
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 mg

## Product Details

**RRID** AB\_1100460

**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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence			▪	
Functional Assays			▪	

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** Bacterial

**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<sub>3</sub>)

**Approx. Protein Concentrations** IgG concentration 1.0mg/ml

**Immunogen** Highly purified protective antigen of *Bacillus anthracis*.

**External Database  
Links**

**UniProt:**

[P13423](#)   [Related reagents](#)

**Entrez Gene:**

[3361714](#)   pxo1\_110   [Related reagents](#)

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**Synonyms**

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**Fusion Partners**

Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/0 myeloma cell line.

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**Specificity**

**Mouse anti Anthrax Protective Antigen antibody, clone C3** recognizes the Protective Antigen of the anthrax toxin. *Bacillus anthracis* produces a toxin composed of three proteins, the Protective Antigen (PA), the Edema Factor (EF) and the Lethal Factor (LF). The three proteins depend on each other for their toxic effect. Both EF and LF functions intracellularly but are too large to enter the cell through existing channels. The PA is responsible for transporting the EF and LF into cells. The 83kDa PA (PA83) binds to the cell surface where a 20 kDa N-terminal fragment (PA20) is cleaved off, exposing binding sites for LF and EF. The remaining 63 kDa portion (PA63) oligomerizes to form a heptamer pre-pore, which then associates with up to three molecules of EF and/or LF. The receptor complex is internalized within endocytotic vessels that are subsequently acidified, transforming the PA heptamer into a pore that releases the active enzymes EF (an adenylate cyclase) and LF (a protease targeting MAPKKs) into the cytosol.

Mouse anti Anthrax Protective Antigen antibody, clone C3 does not cross-react with the Lethal Factor of *Bacillus anthracis*, *Yersinia pestis*, *Francisella tularensis* or *Toxoplasma gondii*. The antibody recognizes both the 83kDa and 63kDa truncated form of PA.

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**References**

1. Barth H, *et al* (2004) Binary bacterial toxins: biochemistry, biology, and applications of common Clostridium and Bacillus proteins. [Microbiol Mol Biol Rev. 68:373-402](#)

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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**

18 months from date of despatch.

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**

For research purposes only

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## 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](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),  
[DyLight@800](#), [FITC](#), [HRP](#)

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