



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## **Anti-DPGA anthrax [F26G3] Standard Size Ab03884-21.0**

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

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**Isotype and Format:** Mouse IgM, Kappa

**Clone Number:** F26G3

**Alternative Name(s) of Target:** DPGA; capsular antigen;  $\gamma$ DPGA; gamma DPGA; poly-gamma-d-glutamic acid; poly- $\gamma$ -d-glutamic acid; antiphagocytic polypeptide capsule

**UniProt Accession Number of Target Protein:**

**Published Application(s):** in vivo, neutralize, ELISA, IF

**Published Species Reactivity:** Bacillus anthracis

**Immunogen:** The original antibody was generated by immunizing BALB/c mice with B. licheniformis  $\gamma$ DPGA in combination with CD40 agonist antibody.

**Specificity:** This antibody specifically binds the poly- $\gamma$ -D-glutamic acid ( $\gamma$ DPGA) capsule of Bacillus anthracis. Bacillus anthracis is surrounded by an antiphagocytic polypeptide capsule composed of poly  $\gamma$ -d-glutamic acid ( $\gamma$ DPGA). The  $\gamma$ DPGA capsule shields the vegetative form of B. anthracis from agglutination by monoclonal antibodies to its cell wall polysaccharide.  $\gamma$ DPGA has been identified recently as a potential target for vaccine development. Bacillus anthracis is a spore-forming bacterium and a causative agent for Anthrax, which is a highly lethal infectious disease in human and poses a great threat as an emerging bioterror agent.

**Application Notes:** The binding of this antibody to B. anthracis capsule was assessed by direct immunofluorescence using the Alexa Fluor 488 (Molecular Probes) labeled antibody. An antigen capture ELISA was developed, where this antibody was used as capture antibody and a horseradish peroxidase conjugate of this antibody was used as an indicator antibody. The assessment of assay sensitivity was done using  $\gamma$ DPGA from B. licheniformis demonstrated that the assay could detect  $\gamma$ DPGA at concentrations as low as 100-140 pg/ml. Passive immunization with this antibody protected >90% of mice in a pulmonary model of anthrax that was lethal in control mice (PMID: 15051894). A 50:50 mixture of PDGA antibodies F24F2 and F26G3 was used in the development of an antigen capture ELISA with a sensitivity of approximately 9 ng/ml of serum after a 1/40 dilution and 2.25 ng/ml for a 1:10 dilution (PMID: 19506008).

**Antibody First Published in:** Kozel et al. MAbs to Bacillus anthracis capsular antigen for immunoprotection in anthrax and detection of antigenemia. Proc Natl Acad Sci U S A. 2004 Apr 6; 101(14): 5042-5047. [PMID:15051894](https://pubmed.ncbi.nlm.nih.gov/15051894/)

**Note on publication:** Describes the generation of two antibodies against B. anthracis  $\gamma$ DPGA and evaluates their capacity to provide protection in pulmonary mouse model of anthrax.

## Product Form

**Size:** 50  $\mu$ g Purified antibody.

**Purification:** Affinity Purified using a recombinant lectin column

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.