



# 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

### SZABO-SCANDIC HandelsgmbH

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## Anti-DPGA anthrax [F26G3] Standard Size Ab03884-23.0

**Isotype and Format:** Rabbit IgG, 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](#)

**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:** 100 µg Purified antibody.

**Purification:** Protein A affinity purified

**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.