# abcam

## Product datasheet

# Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free ab170969



1 References 7 图像

#### 概述

产品名称 Anti-Polyethylene glycol抗体[PEG-B-47] - BSA and Azide free

描述 兔单克隆抗体[PEG-B-47] to Polyethylene glycol - BSA and Azide free

宿主 Rabbit

特异性 This antibody recognizes the terminal methoxy group of the PEG molecule. This antibody does not

cross react with non-specific targets in blood or serum. Both free form of PEG (unconjugated version) and conjugated PEG were tested by sandwich ELISA using <u>ab51257</u>; results showed

that ab51257 only detects conjugated forms of PEG.

经测试应用 适用于: ELISA, WB, IHC-P

种属反应性 与反应: Species independent

免疫原 Chemical/ Small Molecule. This information is proprietary to Abcam and/or its suppliers.

阳性对照 IHC-P: Mouse kidney, spleen, muscle and liver tissue - (animals injected with a PEGylated

protein).

常规说明 ab170969 is the carrier-free version of ab51257.

If you have any questions on our PEG products - please visit our **Polyethylene glycol (PEG)** 

FAQs page.

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

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- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

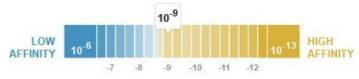
Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

#### 性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C. Do Not Freeze.

**解离常数(K<sub>D</sub>)** K<sub>D</sub> = 2.41 x 10 <sup>-9</sup> M



Learn more about K<sub>D</sub>

存储溶液 Constituent: PBS

纯**度** Protein A purified

**克隆** 单克隆

**克隆编号** PEG-B-47

**同种型** IgG

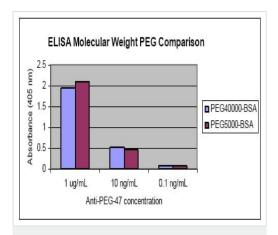
# 应用

### The Abpromise guarantee Abpromise™承诺保证使用ab170969于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

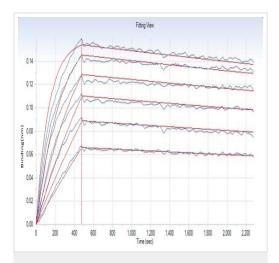
应用	Ab评论	说明
ELISA		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.  This antibody only works on the tissues when the animals are injected with a PEGylated protein.  ab199376 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

#### 靶标



ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free (ab170969)

ELISA assay using <u>ab51257</u> to detect different forms of PEG. PEG40000-BSA is a 40 kDa PEG molecule attached to BSA. PEG5000-BSA is a 5 kDa linear PEG molecule attached to BSA. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab51257</u>).



Ol-RD Scanning - Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free (ab170969)

This antibody affinity data was generated using the same anti-PEG antibody clone, PEG-B-47, in a different buffer formulation (ab51257).

Method: Protein A sensor + Antigen (PEG 5K-BSA at  $0.3\mu g/ml$ )+ antibody (<u>ab51257</u> at 0.0312, 0.0625, 0.125, 0.25, 0.5, 1  $\mu g/m$ ).

Results:

Sample ID: PEG-5K-BSA

KD (M): 2.41E-09

kon(1/Ms): 2.67E+04

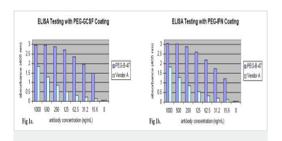
kon Error: 6.81E+02

kdis(1/s): 6.43E-05

kdis Error: 2.92E-06

Full X^2: 0.018444

Full R^2: 0.982059



ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free (ab170969)

Comparison of <u>ab51257</u> and Vendor A mouse MAb in Direct ELISA assy.

Goat anti-rabbit lgG-AP used for anti-PEG-47 detection; goat anti-mouse lgM-AP used for Vendor A MAb detection.

Fig 1a. Direct ELISA using 1 ug/mL of PEG-GCSF.

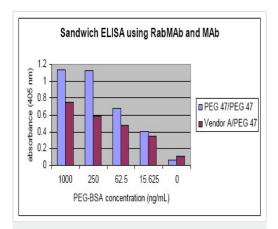
Fig 1b. Direct ELISA using 1 ug/mL of PEG-IFN.

**Comparison to other anti-PEG**: In both direct and sandwich ELISA assays, <u>ab51257</u> shows greater affinity and accuracy than other anti-PEG antibodies when determining the concentration of PEG or PEG-modified proteins. Results were similar whether

detecting PEG itself or PEG-modified targets.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab51257</u>).

Comparison of sandwich ELISA using RabMAb/RabMAb



ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free (ab170969)

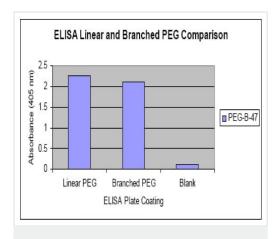
(ab51257/ab51257) and MAb/RabMAb (Vendor A/ab51257) for capture/detection.

Ab51257/ab51257\*: Plate coated with 5 ug/mL of #47; 5 ug/mL of

#47 used for detection (\*Anti-PEG 47 biotin labeled)

Vendor A/ <u>ab51257</u>\*: Plates coated with 100 ug/mL of Vendor A Mouse MAb; 5 ug/mL of #47 used for detection (\*Anti-PEG 47 biotin labeled)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51257).

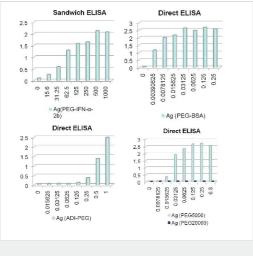


ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free (ab170969)

Comparison of 10 ug/well of activated linear (PEG5K) and branched (PEG40K) PEG using 5 ug/ml of **ab51257** in Direct ELISA assay.

**Accuracy**: By detecting the methoxy group of the PEG molecule itself, <u>ab51257</u> is useful in measuring the pharmacokinetics of PEG-modified molecules in vivo. Data indicate that <u>ab51257</u> detects various length Y-chain PEG molecules as well as single chain PEG molecules with equal affinity. Ab51257 does not cross react with non-specific targets in blood or serum.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51257).



ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free (ab170969)

This data was developed using <u>ab51257</u>, the same antibody clone in a different buffer formulation.

ELISA Graph generated using purified ab51257 at 1µg/mL.

Antigen concentration range:

PEG5000 and PEG20000: 0.0078 - 0.5 µg/mL

ADI-PEG: 0.0156 - 1 μg/mL PEG-BSA: 0.0039 - 0.25μg/mL PEG-IFN-α-2b0.0156 - 1 μg/mL

Secondary antibody was an Alkaline Phosphatase-conjugated Goat

Anti-Rabbit lgG(H+L) at 1/2500.



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