

Product datasheet

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

Recombinant RabMAb

1 References 7 Images

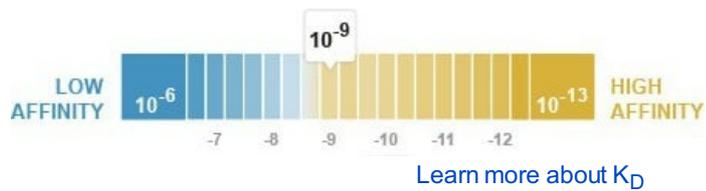
Overview

Product name	Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free
Description	Rabbit monoclonal [PEG-B-47] to Polyethylene glycol - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: ELISA, WB Unsuitable for: IHC-P
Species reactivity	Reacts with: Species independent
Immunogen	Chemical/ Small Molecule. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Mouse kidney, spleen, muscle and liver tissue - (animals injected with a PEGylated protein).
General notes	<p>ab170969 is the carrier-free version of ab51257.</p> <p>If you have any questions on our PEG products - please visit our Polyethylene glycol (PEG) FAQs page.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p>

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	K _D = 2.41 x 10 ⁻⁹ M



Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	PEG-B-47
Isotype	IgG

Applications

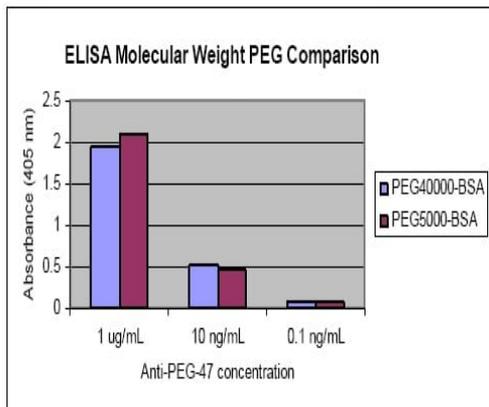
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab170969 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.

Application notes Is unsuitable for IHC-P.

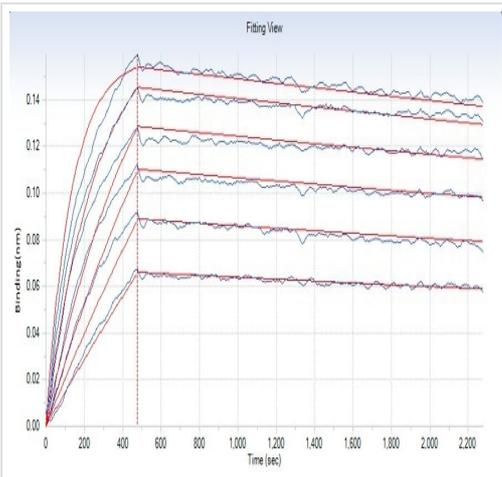
Target

Images



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

ELISA assay using [ab51257](#) 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 ([ab51257](#)).



Functional Studies - 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 0.3µg/ml)+ antibody ([ab51257](#) at 0.0312, 0.0625, 0.125, 0.25, 0.5, 1 µg/m).

Results:

Sample ID: PEG-5K-BSA

KD (M): 2.41E-09

kon(1/Ms): 2.67E+04

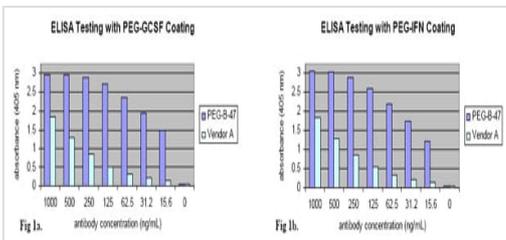
kon Error: 6.81E+02

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 [ab51257](#) and Vendor A mouse MAb in Direct ELISA assay.

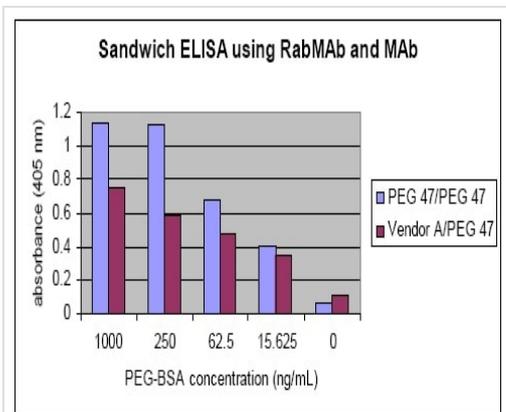
Goat anti-rabbit IgG-AP used for anti-PEG-47 detection; goat anti-mouse IgM-AP used for Vendor A MAb detection.

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, [ab51257](#) 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 ([ab51257](#)).



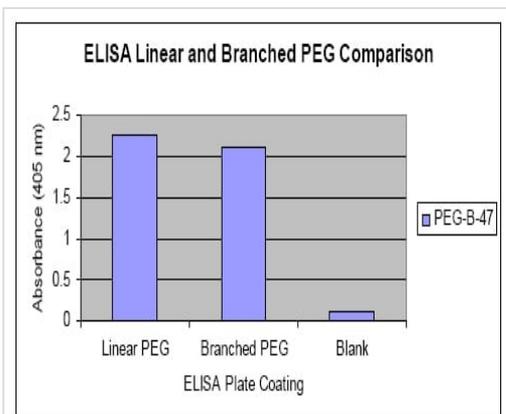
ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free (ab170969)

Comparison of sandwich ELISA using RabMAb/RabMAb ([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/ [ab51257](#)*: 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](#)).

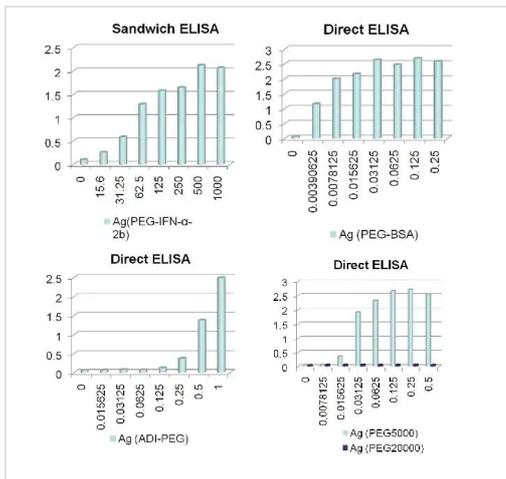


ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] - BSA and Azide free (ab170969)

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, [ab51257](#) is useful in measuring the pharmacokinetics of PEG-modified molecules in vivo. Data indicate that [ab51257](#) 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 [ab51257](#), 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 IgG(H+L) at 1/2500.

Why choose a recombinant antibody?

- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

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

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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