

# Anti-Polyethylene glycol antibody [PEG-B-47] ab51257

**重组 RabMAb**

★★★★★ **2 Abreviews** **51 References** **9 图像**

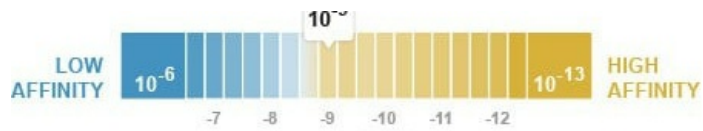
### 概述

<b>产品名称</b>	Anti-Polyethylene glycol抗体[PEG-B-47]
<b>描述</b>	兔单克隆抗体[PEG-B-47] to Polyethylene glycol
<b>宿主</b>	Rabbit
<b>特异性</b>	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 ab51257; results showed that ab51257 only detects conjugated forms of PEG.
<b>经测试应用</b>	<b>适用于:</b> ELISA, WB, IHC-P
<b>种属反应性</b>	<b>与反应:</b> Species independent
<b>免疫原</b>	Chemical/ Small Molecule corresponding to Polyethylene glycol conjugated to keyhole limpet haemocyanin. KLH-Polyethylene glycol with a terminal methoxy group.
<b>阳性对照</b>	IHC-P: Mouse injected with PEGylated protein kidney, muscle, liver and spleen tissue. WB: BSA-PEG.
<b>常规说明</b>	<p>If you have any questions on our PEG products - please visit our <b><a href="#">Polyethylene glycol (PEG) FAQs</a></b> page.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <b><a href="#">see here</a></b>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><a href="#">RabMAb<sup>®</sup> patents</a></b>.</p>

### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C.
<b>解离常数 (K<sub>D</sub>)</b>	K <sub>D</sub> = 2.41 x 10 <sup>-9</sup> M





[Learn more about K<sub>D</sub>](#)

**存储溶液** pH: 7.2  
 Preservative: 0.01% Sodium azide  
 Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

**纯度** Protein A purified

**克隆** 单克隆

**克隆编号** PEG-B-47

**同种型** IgG

**应用**

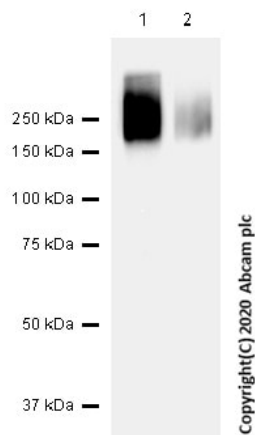
**The Abpromise guarantee** [Abpromise™](#) 承诺保证使用 ab51257 于以下的经测试应用

“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 a concentration of 0.5 - 5 µg/ml.
WB		Use a concentration of 0.015 - 0.075 µg/ml.
IHC-P		1/100. This antibody only works on the tissues when the animals are injected with a PEGylated protein. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

**靶标**

**图片**



Western blot - Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257)

**Lane 1** : Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257) at 1/1000 dilution (Purified)

**Lane 2** : Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257) at 1/5000 dilution (Purified)

**All lanes** : Bovine serum albumin (BSA) and PEG 5000 conjugated protein

Lysates/proteins at 0.015 µg per lane.

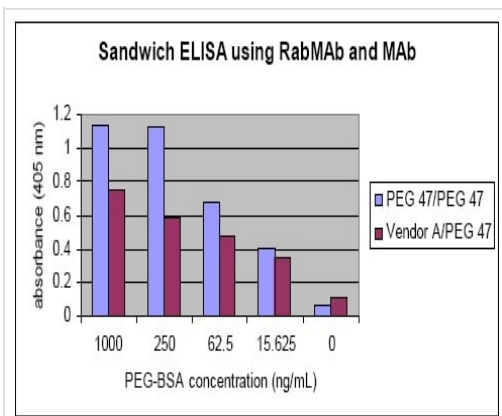
#### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Observed band size:** 280 kDa

**Exposure time:** 120 seconds

Blocking/Diluting buffer and concentration 5% NFDm/TBST

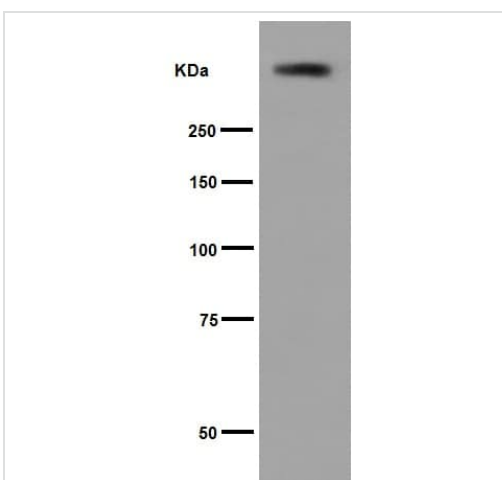


ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257)

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).



Western blot - Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257)

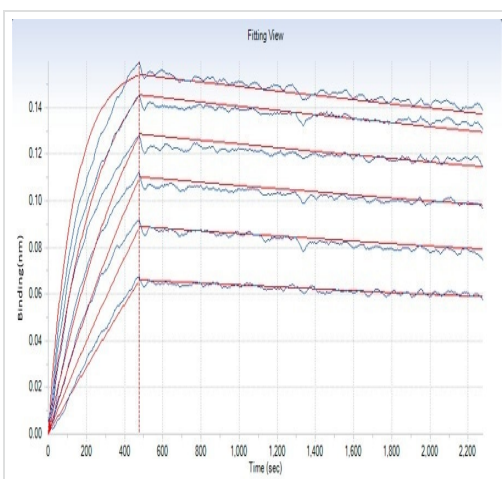
Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257) at 0.015 µg/ml + BSA-PEG at 10 µg

**Secondary**

Goat Anti-Rabbit IgG, (H+L), HRP-conjugated at 1/1000 dilution

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



O1-RD Scanning - Anti-Polyethylene glycol antibody [PEG-B-47] (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

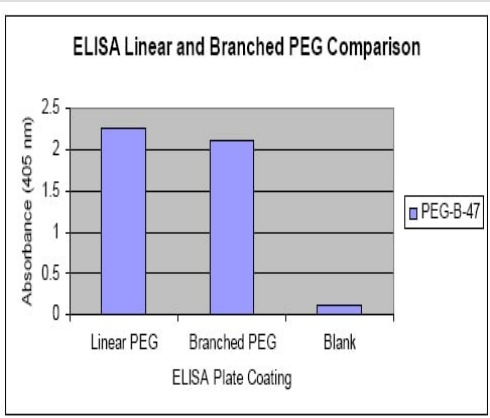
kon Error: 6.81E+02

kdis(1/s): 6.43E-05

kdis Error: 2.92E-06

Full X^2: 0.018444

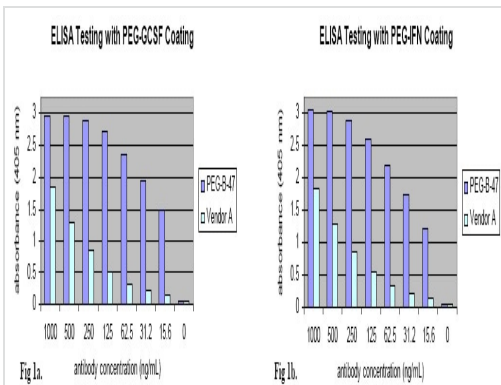
Full R^2: 0.982059



ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257)

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.



ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257)

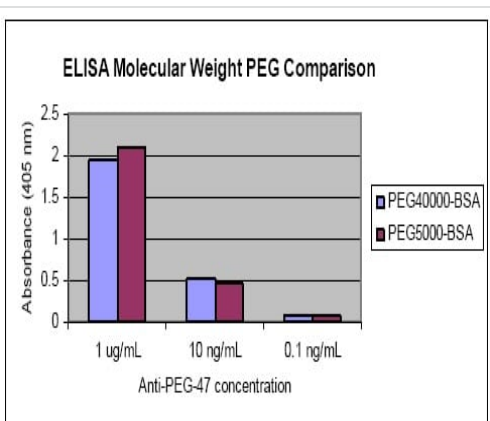
Comparison of ab51257 and Vendor A mouse MAb in Direct ELISA assay.

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.

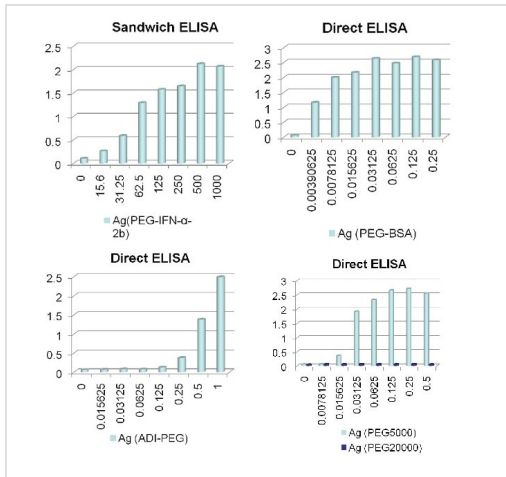
Fig 1b. Direct ELISA using 1 ug/mL of PEG-IFN.

**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.



ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257)

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.



ELISA Graph generated using purified ab51257 at 1 $\mu$ g/mL.

Antigen concentration range:

PEG5000 and PEG20000: 0.0078 - 0.5  $\mu$ g/mL

ADI-PEG: 0.0156 - 1  $\mu$ g/mL

PEG-BSA: 0.0039 - 0.25 $\mu$ g/mL

PEG-IFN- $\alpha$ -2b: 0.0156 - 1  $\mu$ g/mL

Secondary antibody was an Alkaline Phosphatase-conjugated Goat

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

ELISA - Anti-Polyethylene glycol antibody [PEG-B-47] (ab51257)

**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] (ab51257)

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

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