Anti-CD38 antibody [EPR4106] ab108403

Overview

Product name: Anti-CD38 antibody [EPR4106]
Description: Rabbit monoclonal [EPR4106] to CD38
Host species: Rabbit
Specificity: Not suitable for mouse and rat samples because antibody shows a non-specific cytoplasmic staining in almost all tested mouse and rat tissues.

Tested applications:
- Suitable for: WB, IHC-P
- Unsuitable for: Flow Cyt or ICC/IF

Species reactivity: Reacts with: Human

Immunogen: Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) corresponding to Human CD38 (C terminal).
(Peptide available as ab194748)

Positive control:
- WB: HeLa, THP-1, Raji and HuT-78 cell lysates, Human plasma and fetal thymus tissue lysates.
- IHC-P: Human endometrial adenocarcinoma, tonsil, lymph node, skeletal muscle and normal colon tissues.

General notes:
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

This product is a recombinant rabbit monoclonal antibody.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.
Stable for 12 months at -20°C.

**Dissociation constant (K_D)**

\[ K_D = 1.40 \times 10^{-11} \text{ M} \]

![Learn more about K_D](image)

**Storage buffer**

pH: 7.20  
Preservative: 0.01% Sodium azide  
Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

**Purity**

Protein A purified

**Clonality**

Monoclonal

**Clone number**

EPR4106

**Isotype**

IgG

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### Applications

Our **Abpromise guarantee** covers the use of **ab108403** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<th>Application</th>
<th>Abreviews</th>
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<td>WB</td>
<td>1/2000. Detects a band of approximately 45 kDa (predicted molecular weight: 34 kDa). For unpurified use at 1/1000 - 1/10000.</td>
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**Application notes**

Is unsuitable for Flow Cyt or ICC/IF.

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### Target

**Function**

Synthesizes cyclic ADP-ribose, a second messenger for glucose-induced insulin secretion. Also has cADPr hydrolase activity. Also moonlights as a receptor in cells of the immune system.

**Tissue specificity**

Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.

**Sequence similarities**

Belongs to the ADP-ribosyl cyclase family.

**Developmental stage**

Preferentially expressed at both early and late stages of the B and T-cell maturation. It is also detected on erythroid and myeloid progenitors in bone marrow, where the level of surface expression was shown to decrease during differentiation of blast-forming unit E to colony-forming unit E.

**Cellular localization**

Membrane.

**Form**

There are 2 isoforms produced by alternative splicing.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD38 with purified ab108403 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD38 with unpurified ab108403 at a dilution of 1/100.
Western blot - Anti-CD38 antibody [EPR4106] (ab108403)

**All lanes** : Anti-CD38 antibody [EPR4106] (ab108403) at 1/2000 dilution (purified)

**Lanes 1 & 3** : HuT-78 cell lysate
**Lane 2** : Human fetal thymus tissue lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes** : Peroxidase conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 34 kDa
**Observed band size:** 45 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

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Western blot - Anti-CD38 antibody [EPR4106] (ab108403)

**All lanes** : Anti-CD38 antibody [EPR4106] (ab108403) at 1/1000 dilution (unpurified)

**Lane 1** : HeLa cell lysate
**Lane 2** : Human plasma cell lysate
**Lane 3** : THP-1 cell lysate
**Lane 4** : HuT-78 cell lysate
**Lane 5** : Human fetal thymus cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 34 kDa
**Observed band size:** 45 kDa
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human skeletal muscle tissue labelling CD38 with purified ab108403 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human endometrial adenocarcinoma tissue labelling CD38 with unpurified ab108403 at a dilution of 1/100.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lymph node tissue labelling CD38 with unpurified ab108403.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of normal human colon tissue labelling CD38 with unpurified ab108403.

Equilibrium disassociation constant (K_D)
Learn more about K_D

Click here to learn more about K_D

Other-Anti-CD38 antibody [EPR4106](ab108403)

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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