abcam

Product datasheet

Anti-CD81 antibody [EPR4244] - BSA and Azide free ab232390



2 References 3 Images

Overview

Product name Anti-CD81 antibody [EPR4244] - BSA and Azide free

Description Rabbit monoclonal [EPR4244] to CD81 - BSA and Azide free

Host species Rabbit

SpecificityTo detect stronger signal in exosome lysate with this antibody, please try protocols of exosome

 $isolation\ in\ PMID:\ 33184263,\ PMID:\ 34502537\ ,\ PMID:\ 32121214,\ PMID:\ 32375124.$

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Ramos, JAR, U87-MG, IM-9, peripheral blood mononuclear cell (PBMC), C6, PC-12,

C2C12, mouse brain, mouse heart, A549, 293T, HeLa, Huh7, HCT 116, LNCaP, U-87 and

RAW264.7 cell lysates.

General notes ab232390 is the carrier-free version of <u>ab109201</u>.

Our <u>carrier-free</u> 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 <u>conjugation kits</u> 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[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] 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
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

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For more information see here.

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.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR4244

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab232390 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
WB		Use at an assay dependent concentration. Predicted molecular weight: 25 kDa. For WB related protocols, please refer to the Protocols section below.

Target

Function May play an important role in the regulation of lymphoma cell growth. Interacts with a 16-kDa Leu-

13 protein to form a complex possibly involved in signal transduction. May acts a the viral receptor

for HCV.

Tissue specificity Hematolymphoid, neuroectodermal and mesenchymal tumor cell lines.

Involvement in disease Defects in CD81 are the cause of immunodeficiency common variable type 6 (CVID6)

[MIM:613496]; also called antibody deficiency due to CD81 defect. CVID6 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen. The defect results from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of

circulating B cells is usually in the normal range, but can be low.

Sequence similarities Belongs to the tetraspanin (TM4SF) family.

Post-translational modifications

Not glycosylated.

Cellular localization Membrane.

Images



Western blot - Anti-CD81 antibody [EPR4244] - BSA and Azide free (ab232390)

All lanes: Anti-CD81 antibody [EPR4244] (ab109201) at 1/1000 dilution

Lane 1 : RAW 264.7 (Mouse Abelson murine leukemia virusinduced tumor macrophage) whole cell lysate with NFDM/TBST

Lane 2: C2C12 (Mouse myoblasts myoblast) whole cell lysate with NFDM/TBST

Lane 3: Mouse brain tissue lysate with NFDM/TBST

Lane 4: Mouse heart tissue lysate with NFDM/TBST

Lane 5: Huh7 (Human hepatocellular carcinoma epithelial cell) whole cell lysate with NFDM/TBST

Lane 6 : HL-60 (Human acute promyelocytic leukemia promyeloblast) whole cell lysate with NFDM/TBST

Lane 7: HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysate with NFDM/TBST

Lane 8: LNCaP (Human prostate carcinoma epithelial cell) whole cell lysate with NFDM/TBST

Lane 9: U-87 MG (Human glioblastoma-astrocytoma epithelial cell) whole cell lysate with NFDM/TBST

Lane 10: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate with NFDM/TBST

Lane 11: A549 (Human lung carcinoma epithelial cell) whole cell lysate with NFDM/TBST

Lane 12: 293T (Human embryonic kidney epithelial cell) whole cell lysate with NFDM/TBST

Lysates/proteins at 20 µg per lane.

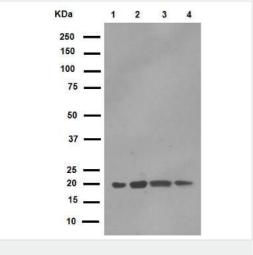
Blocking peptides at 5 % per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Predicted band size: 25 kDa **Observed band size:** 25 kDa

Exposure time: 60 seconds



Western blot - Anti-CD81 antibody [EPR4244] - BSA and Azide free (ab232390)

All lanes : Anti-CD81 antibody [EPR4244] (<u>ab109201</u>) at 1/700 dilution (unpurified)

Lane 1: Ramos (Human Burkitt's lymphoma cell line) cell lysate

Lane 2 : U87-MG (Human glioblastoma-astrocytoma epithelial cell line) cell lysate

Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) cell lysate

Lane 4 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) cell lysate

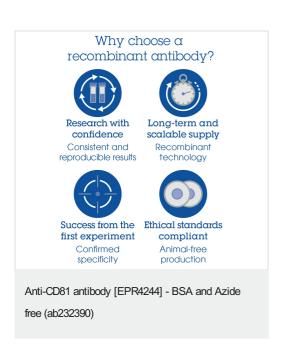
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 25 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109201).



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