abcam

Product datasheet

Anti-TREM2 antibody [EPR20243] - BSA and Azide free ab232470





RabMAb



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Overview

Product name Anti-TREM2 antibody [EPR20243] - BSA and Azide free

Description Rabbit monoclonal [EPR20243] to TREM2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IP, WB

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Wild-type THP-1 and THP-1 cell lysate.

General notes ab232470 is the carrier-free version of ab209814.

> 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 cellbased 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® 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

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 numberEPR20243

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab232470 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
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 26 kDa (predicted molecular weight: 25 kDa).

Target

Function May have a role in chronic inflammations and may stimulate production of constitutive rather than

inflammatory chemokines and cytokines. Forms a receptor signaling complex with TYROBP and

triggers activation of the immune responses in macrophages and dendritic cells.

Tissue specificity Expressed on macrophages and dendritic cells but not on granulocytes or monocytes. In the CNS

strongest expression seen in the basal ganglia, corpus callosum, medulla oblongata and spinal

cord.

Involvement in diseaseDefects in TREM2 are a cause of polycystic lipomembranous osteodysplasia with sclerosing

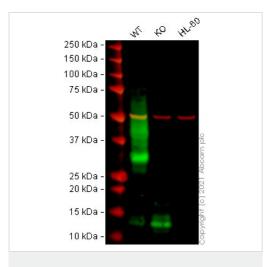
leukoencephalopathy (PLOSL) [MIM:221770]; also known as presenile dementia with bone cysts or Nasu-Hakola disease (NHD). PLOSL is a recessively inherited disease characterized by a combination of psychotic symptoms rapidly progressing to presenile dementia and bone cysts restricted to wrists and ankles. PLOSL has a global distribution, although most of the patients have been diagnosed in Finland and Japan, with an estimated population prevalence of 2x10(-6)

in the Finns.

Sequence similarities Contains 1 lg-like V-type (immunoglobulin-like) domain.

Cellular localization Secreted and Cell membrane.

Images



Western blot - Anti-TREM2 antibody [EPR20243] - BSA and Azide free (ab232470)

All lanes : Anti-TREM2 antibody [EPR20243] (<u>ab209814</u>) at 1/1000 dilution

Lane 1: Wild-type THP-1 cell lysate

Lane 2: TREM2 knockout THP-1 cell lysate

Lane 3: HL-60 cell lysate

Lysates/proteins at 20 µg per lane.

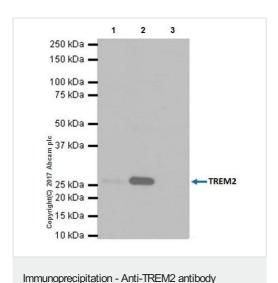
Performed under reducing conditions.

Predicted band size: 25 kDa **Observed band size:** 30 kDa

This data was developed using the same antibody clone in a different buffer formulation (ab209814).

Lanes 1 - 3: Merged signal (red and green). Green - <u>ab209814</u> observed at 30 kDa. Red - loading control <u>ab7291</u> (Mouse anti-Alpha Tubulin [DM1A]) observed at 55 kDa.

<u>ab209814</u> was shown to react with TREM2 in wild-type THP-1 cells in Western blot with loss of signal observed in TREM2 knockout cell line <u>ab269489</u> (TREM2 knockout cell lysate <u>ab269652</u>). Wild-type THP-1 and TREM2 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween[®]) before incubation with <u>ab209814</u> and <u>ab7291</u> (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



[EPR20243] - BSA and Azide free (ab232470)

TREM2 was immunoprecipitated from 0.35 mg of THP-1 (Human monocytic leukemia cell line) whole cell lysate with <u>ab209814</u> at 1/40 dilution. Western blot was performed from the immunoprecipitate using <u>ab209814</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

Lane 1: THP-1 whole cell lysate, 10 µg (Input).

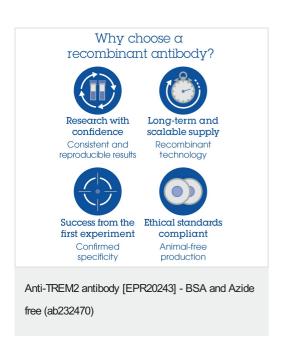
Lane 2: ab209814 IP in THP-1 whole cell lysate.

Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of $\underline{ab209814}$ in THP-1 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab209814).



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