

Product datasheet

Anti-TREM2 antibody [EPR20243] ab209814

KO **VALIDATED** Recombinant RabMAb

★★★★☆ [5 Abreviews](#) [7 References](#) [4 Images](#)

Overview

Product name	Anti-TREM2 antibody [EPR20243]
Description	Rabbit monoclonal [EPR20243] to TREM2
Host species	Rabbit
Tested applications	Suitable for: IP, WB Unsuitable for: ICC/IF or IHC-P
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 whole cell lysate treated with 100ng/ml Phorbol-12-myristate-13-acetate (PMA) for 72 hours. IP: THP-1 whole cell lysate.
General notes	<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> <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.</p>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20243

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab209814 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

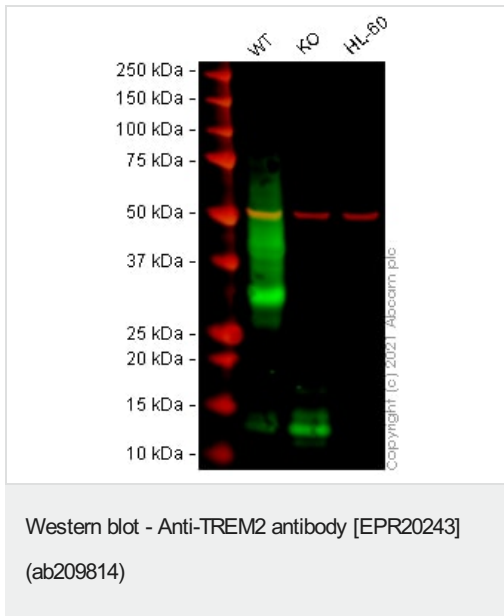
Application	Abreviews	Notes
IP		1/40.
WB	★★★★★ (2)	1/1000. Detects a band of approximately 26 kDa (predicted molecular weight: 25 kDa).

Application notes Is unsuitable for ICC/IF or IHC-P.

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 disease	Defects 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 2×10^{-6} in the Finns.
Sequence similarities	Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Cellular localization	Secreted and Cell membrane.

Images



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

Lane 1 : Wild-type THP-1 cell lysate

Lane 3 : HL-60 cell lysate

Lysates/proteins at 20 µg per lane.

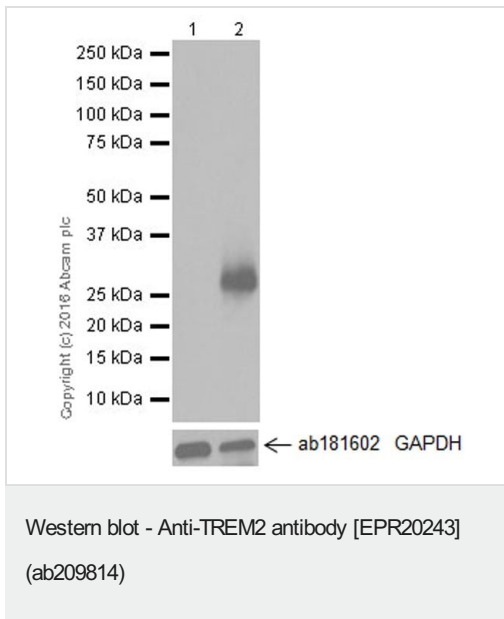
Performed under reducing conditions.

Predicted band size: 25 kDa

Observed band size: 30 kDa

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

ab209814 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 **ab269489** (TREM2 knockout cell lysate **ab269652**). 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 ab209814 and **ab7291** (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 (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



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

Lane 1 : Untreated THP-1 (Human monocytic leukemia cell line) whole cell lysate

Lane 2 : THP-1 whole cell lysate treated with 100ng/ml Phorbol-12-myristate-13-acetate (PMA) for 72 hours

Lysates/proteins at 20 µg per lane.

Secondary

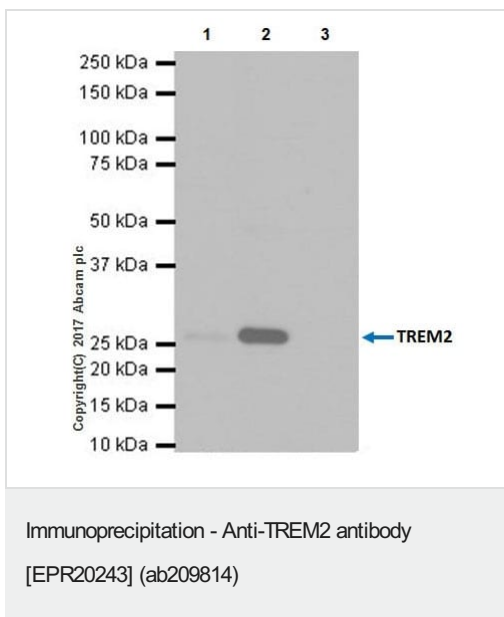
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 25 kDa

Observed band size: 26 kDa

Exposure time: 4 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



TREM2 was immunoprecipitated from 0.35 mg of THP-1 (Human monocytic leukemia cell line) whole cell lysate with ab209814 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab209814 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), 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 IgG ([ab172730](#)) instead of ab209814 in THP-1 whole cell lysate.

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

Exposure time: 3 minutes.

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-TREM2 antibody [EPR20243] (ab209814)

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

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