Anti-CD200 Antibody [PSH01-48]

HA721691

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, IF-Tissue, FC
Molecular Wt:	Predicted band size: 31 kDa
Clone number:	PSH01-48

Description: OX-2 membrane glycoprotein, also named CD200 (Cluster of Differentiation 200) is a human protein encoded by the CD200 gene. CD200 gene is in human located on chromosome 3 in proximity to genes encoding other B7 proteins CD80/CD86. In mice CD200 gene is on chromosome 16. The protein encoded by this gene is a type-1 membrane glycoprotein, which contains two IgSF immunoglobulin domains, transmembrane region and a 19 amino acid long cytoplasmatic domain. CD 200 belongs to the immunoglobulin superfamily, particularly belongs to the B7 receptor family.

Immunogen: Recombinant protein within human CD200 aa 1-259 / 278.

Positive control: SK-MEL-28 cell lysate, NCI-H226 cell lysate, human brain tissue lysate, human placenta tissue lysate, human lung tissue lysate, human placenta tissue, human tonsil tissue, SK-MEL-28, NCI-H226.

Subcellular location: Cell membrane.

Database links: SwissProt: P41217 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:2,000
IF-Tissue	1:200
FC	1:500-1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

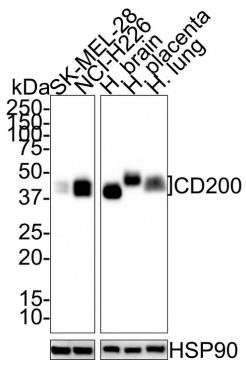

Fig1: Western blot analysis of CD200 on different lysates with Rabbit anti-CD200 antibody (HA721691) at 1/1,000 dilution.

Lane 1: SK-MEL-28 cell lysate (20 µg/Lane)
Lane 2: NCI-H226 cell lysate (20 µg/Lane)
Lane 3: Human brain tissue lysate (30 µg/Lane)
Lane 4: Human placenta tissue lysate (30 µg/Lane)
Lane 5: Human lung tissue lysate (30 µg/Lane)

Predicted band size: 31 kDa
Observed band size: 40-50kDa

Exposure time: 40 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721691) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/100,000 dilution was used for 1 hour at room temperature.

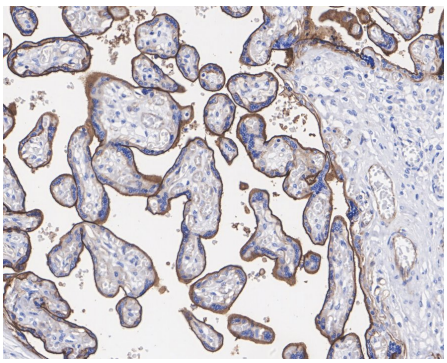

Fig2: Immunohistochemical analysis of paraffin-embedded human placenta tissue with Rabbit anti-CD200 antibody (HA721691) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA721691) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

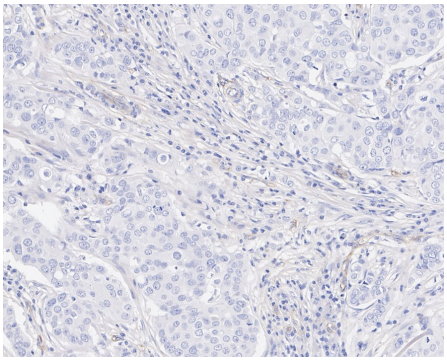

Fig3: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue (negative control) with Rabbit anti-CD200 antibody (HA721691) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA721691) at 1/800 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

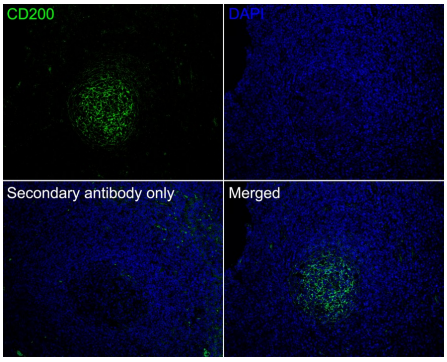

Fig4: Immunofluorescence analysis of paraffin-embedded human tonsil tissue labeling CD200 with Rabbit anti-CD200 antibody (HA721691) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA721691, green) at 1/200 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

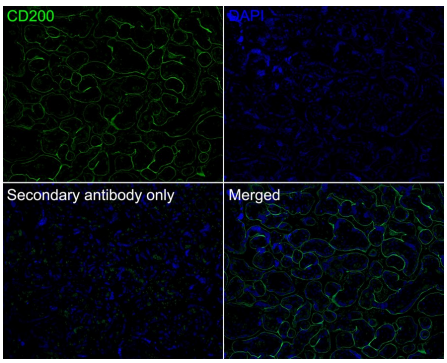

Fig5: Immunofluorescence analysis of paraffin-embedded human placenta tissue labeling CD200 with Rabbit anti-CD200 antibody (HA721691) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA721691, green) at 1/200 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

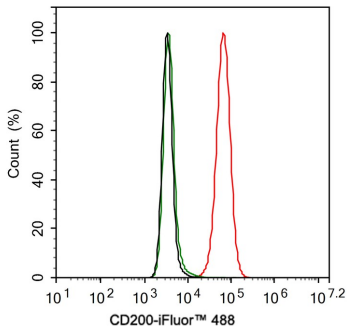

Fig6: Flow cytometric analysis of SK-MEL-28 cells labeling CD200.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA721691, 1ug/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

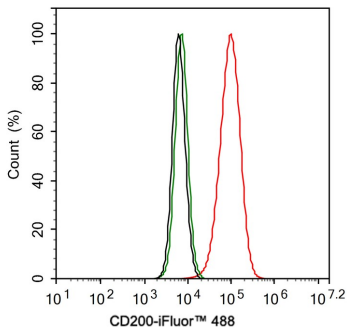

Fig7: Flow cytometric analysis of NCI-H226 cells labeling CD200.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA721691, 1ug/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

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

Background References

1. Kotwica-Mojzych K et al. CD200:CD200R Interactions and Their Importance in Immunoregulation. Int J Mol Sci. 2021 Feb
2. Choueiry F et al. CD200 promotes immunosuppression in the pancreatic tumor microenvironment. J Immunother Cancer. 2020 Jun