

Anti-CD2 Antibody [PSH05-84]

HA722483



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 39 kDa
Clone number:	PSH05-84

Description: CD2 is a transmembrane glycoprotein expressed early in thymocyte development and present on most circulating T cells. CD2 plays a role in T cell adhesion through binding to its ligand CD58 (LFA-3). Stimulation of CD2 also leads to T cell activation and proliferation. T cells from mice deficient in both CD2 and CD28 have severe defects in T cell activation and function, while T cells deficient in either CD2 or CD28 are still capable of mounting a response, suggesting that CD2 and CD28 may have overlapping functions and may be able to compensate for each other. In addition, engagement of CD2 and CD58 was recently demonstrated to be the primary costimulatory signal in T cells that lack CD28. CD2 expression also distinguishes a subset of plasmacytoid dendritic cells found in tumors and tonsils that express lysozyme, higher levels of IL-12 p40, and higher levels of CD80.

Immunogen: Recombinant protein within Human CD2 aa 25-209 (Extracellular).

Positive control: Jurkat cell lysate, human T cell lymphoma tissue, human appendix tissue, human spleen tissue, human liver tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: P06729 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:1,000

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

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

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Images

Fig1: Western blot analysis of CD2 on different lysates with Rabbit anti-CD2 antibody (HA722483) at 1/1,000 dilution.

Lane 1: Jurkat cell lysate
Lane 2: Raji cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 39 kDa
Observed band size: 50 kDa

Exposure time: 2 minutes; ECL: K1801;

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 (HA722483) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

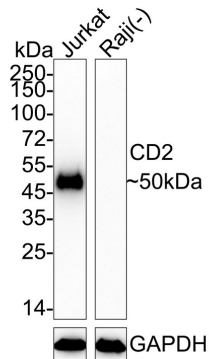
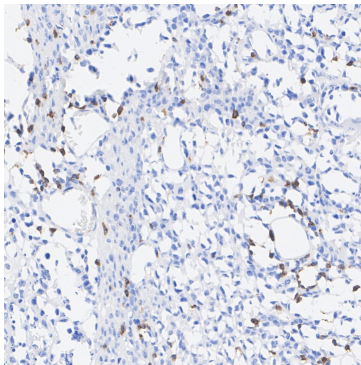
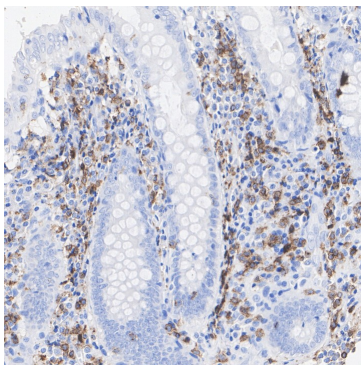


Fig2: Immunohistochemical analysis of paraffin-embedded human T cell lymphoma tissue with Rabbit anti-CD2 antibody (HA722483) at 1/1,000 dilution.



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 ddH₂O and PBS, and then probed with the primary antibody (HA722483) at 1/1,000 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 appendix tissue with Rabbit anti-CD2 antibody (HA722483) at 1/1,000 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 ddH₂O and PBS, and then probed with the primary antibody (HA722483) at 1/1,000 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.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

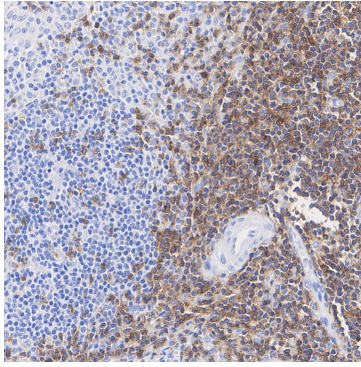


Fig4: Immunohistochemical analysis of paraffin-embedded human spleen tissue with Rabbit anti-CD2 antibody (HA722483) at 1/1,000 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (HA722483) at 1/1,000 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.

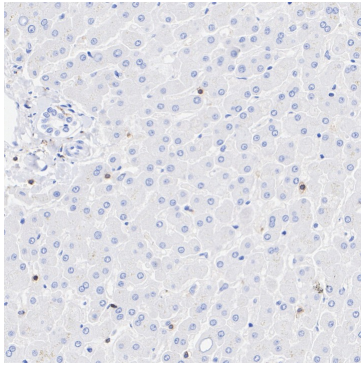


Fig5: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-CD2 antibody (HA722483) at 1/1,000 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (HA722483) at 1/1,000 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.

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

Background References

1. Judith Leitner, Dietmar Herndler-Brandstetter, Gerhard J Zlabinger, Beatrix Grubeck-Loebenstern, Peter Steinberger. CD58/CD2 Is the Primary Costimulatory Pathway in Human CD28-CD8+ T Cells. *J Immunol.* 2015 Jul 15;195(2):477-87.
2. Toshimichi Matsui, John E Connolly, Mark Michnevitz, Damien Chaussabel, Chun-I Yu, Casey Glaser, Sasha Tindle, Marc Pypaert, Heidi Freitas, Bernard Piqueras, Jacques Banchereau, A Karolina Palucka. CD2 distinguishes two subsets of human plasmacytoid dendritic cells with distinct phenotype and functions. *J Immunol.* 2009 Jun 1;182(11):6815-23.

Hangzhou Huan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn



 华安生物

 HUABIO

 www.huabio.cn