Anti-CD43 Antibody [A2F8-R]

HA601286

Product Type:	Recombinant Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P, IF-Tissue
Molecular Wt:	Predicted band size: 40 kDa
Clone number:	A2F8-R

Description: This gene encodes a highly sialylated glycoprotein that functions in antigen-specific activation of T cells, and is found on the surface of thymocytes, T lymphocytes, monocytes, granulocytes, and some B lymphocytes. It contains a mucin-like extracellular domain, a transmembrane region and a carboxy-terminal intracellular region. Predominant cell surface sialoprotein of leukocytes which regulates multiple T-cell functions, including T-cell activation, proliferation, differentiation, trafficking and migration. Positively regulates T-cell trafficking to lymph-nodes via its association with ERM proteins (EZR, RDX and MSN). Negatively regulates Th2 cell differentiation and predisposes the differentiation of T-cells towards a Th1 lineage commitment. Promotes the expression of IFN-gamma by T-cells during T-cell receptor (TCR) activation of naive cells and induces the expression of IFN-gamma by CD4+ T-cells and to a lesser extent by CD8+ T-cells. Plays a role in preparing T-cells for cytokine sensing and differentiation into effector cells by inducing the expression of cytokine receptors IFNGR and IL4R, promoting IFNGR and IL4R signaling and by mediating the clustering of IFNGR with TCR. Acts as a major E-selectin ligand responsible for Th17 cell rolling on activated vasculature and recruitment during inflammation. Mediates Th17 cells, but not Th1 cells, adhesion to E-selectin. Acts as a T-cell counter-receptor for SIGLEC1.

Immunogen:	Synthetic peptide within C-terminal human CD43.
Positive control:	K-562 cell lysate, HL-60 cell lysate, THP-1 cell lysate, U-937 cell lysate, U-937, human B lymphocyte tumor tissue, human tonsil tissue.
Subcellular location:	Membrane, microvillus, uropodium; Nucleus, PML body.
Database links:	SwissProt: P16150 Human
Recommended Dilutions:	
WB	1:1,000
IF-Cell	1:250
IHC-P	1:1,000
IF-Tissue	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

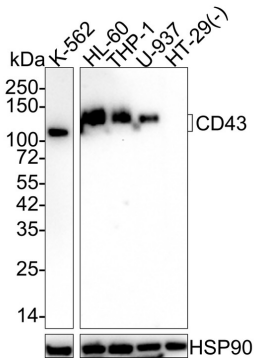

Fig1: Western blot analysis of CD43 on different lysates with Mouse anti-CD43 antibody (HA601286) at 1/1,000 dilution.

Lane 1: K-562 cell lysate
Lane 2: HL-60 cell lysate
Lane 3: THP-1 cell lysate
Lane 4: U-937 cell lysate
Lane 5: HT-29 cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 40 kDa
Observed band size: 100-130 kDa

Exposure time: 3 minutes;

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 (HA601286) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

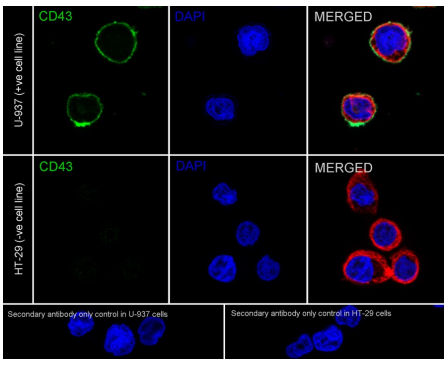

Fig2: Immunocytochemistry analysis of U-937 (positive) and HT-29 (negative) labeling CD43 with Mouse anti-CD43 antibody (HA601286) at 1/250 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Mouse anti-CD43 antibody (HA601286) at 1/250 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

beta Tubulin (ET1602-4, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Rabbit IgG H&L (iFluor™ 594, HA1122) were used as the secondary antibody at 1/1,000 dilution.

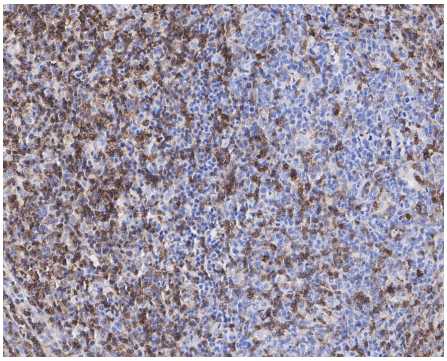

Fig3: Immunohistochemical analysis of paraffin-embedded human B lymphocyte tumor tissue with Mouse anti-CD43 antibody (HA601286) at 1/1,000 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (HA601286) 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.

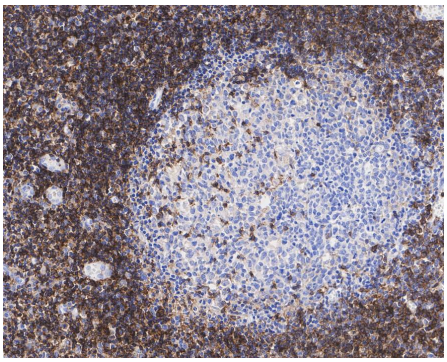

Fig4: Immunohistochemical analysis of paraffin-embedded human tonsil tissue with Mouse anti-CD43 antibody (HA601286) at 1/1,000 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (HA601286) 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.

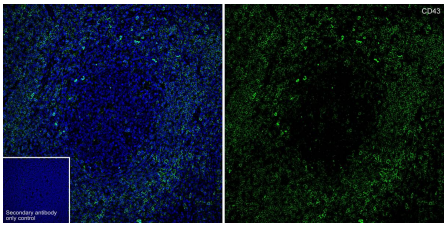

Fig5: Application: IF-Tissue

Species: Human

Site: tonsil

Sample: Paraffin-embedded section

Antibody concentration: 1/1,000

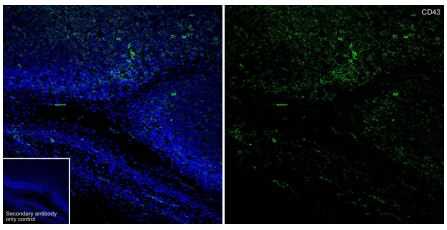

Fig6: Application: IF-Tissue

Species: Human

Site: tonsil

Sample: Paraffin-embedded section

Antibody concentration: 1/1,000

Background References

1. Fay KT. et. al. Increased mortality in CD43-deficient mice during sepsis. PLoS One. 2018 Sep 18;13(9):e0202656.
2. Ma XB. et. al. Coexpression of CD5 and CD43 predicts worse prognosis in diffuse large B-cell lymphoma. Cancer Med. 2018 Sep;7(9):4284-4295.