Anti-CD27 Antibody [JB40-98]

ET7107-73

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 29 kDa
Clone number:	JB40-98

Description: The tumor necrosis factor (TNF) receptor family is composed of several type I integral membrane glycoproteins that exhibit homology in their cysteine-rich extracellular domains. Members of this family include FAS, OX40, CD27 and CD30. Ligands for these receptors are often type II transmembrane glycoproteins, as is the case for CD27 and CD30. CD27 is a homodimeric lymphocyte-specific surface antigen present on T and B lymphocytes. Activation of the CD3 complex via the T cell receptor for antigen leads to an increase in CD27 expression. Together, CD27 and its ligand, CD27L, generate co-stimulatory signals required for complete T cell activation. CD30 is a surface marker for neoplastic cells of the Hodgkin's lymphoma and related hematologic malignancies. CD30L has been shown to enhance the proliferation of the Hodgkin's cell line HDLM-2, but exerts antiproliferative effects on large cell anaplastic lymphoma cell lines.

Immunogen: Synthetic peptide corresponding to Human Intracellular domain of CD27 aa 51-100 / 260.

Positive control: Raji cell lysate, mouse spleen tissue, rat spleen tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: P26842 Human | P41272 Mouse
Entrez Gene: 500318 Rat

Recommended Dilutions:

WB	1:2,000
IHC-P	1:5,000

Storage Buffer: 1*TBS (pH7.4), 0.05% 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

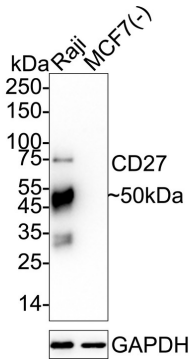

Fig1: Western blot analysis of CD27 on different lysates with Rabbit anti-CD27 antibody (ET7107-73) at 1/2,000 dilution.

Lane 1: Raji cell lysate
Lane 2: MCF7 cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 29 kDa
Observed band size: 50 kDa

Exposure time: 1 minute; 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 (ET7107-73) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

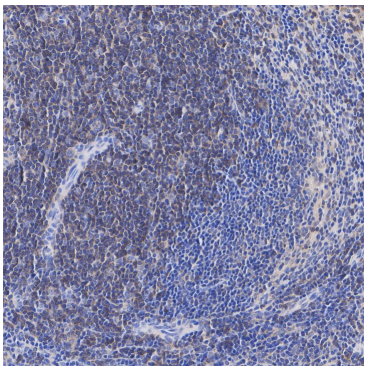

Fig2: Immunohistochemical analysis of paraffin-embedded mouse spleen tissue with Rabbit anti-CD27 antibody (ET7107-73) at 1/5,000 dilution.

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 (ET7107-73) at 1/5,000 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.

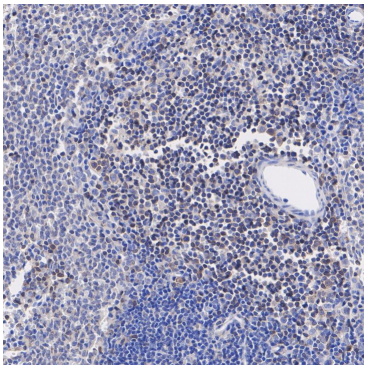

Fig3: Immunohistochemical analysis of paraffin-embedded rat spleen tissue with Rabbit anti-CD27 antibody (ET7107-73) at 1/5,000 dilution.

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 (ET7107-73) at 1/5,000 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.

Background References

1. Gong L et al. Nasopharyngeal carcinoma cells promote regulatory T cell development and suppressive activity via CD70-CD27 interaction. Nat Commun. 2023 Apr
2. Jaeger-Ruckstuhl CA et al. Signaling via a CD27-TRAF2-SHP-1 axis during naive T cell activation promotes memory-associated gene regulatory networks. Immunity. 2024 Feb