## **Anti-CD20 Antibody [SY12-01]**

## ET1605-33



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human, Monkey

Applications: WB, IHC-P, IP

Molecular Wt: 33 kDa
Clone number: SY12-01

Description: CD20 is a leukocyte surface antigen consisting of four transmembrane regions and

cytoplasmic N- and C-termini. The cytoplasmic domain of CD20 contains multiple phosphorylation sites, leading to additional isoforms. CD20 is expressed primarily on B cells but has also been detected on both normal and neoplastic T cells. CD20 functions as a calcium-permeable cation channel, and it is known to accelerate the G0 to G1 progression induced by IGF-1. CD20 is activated by the IGF-1 receptor via the alpha subunits of the heterotrimeric G proteins. Activation of CD20 significantly increases DNA synthesis and is thought to involve basic helix-loop-helix leucine zipper transcription

factors.

**Immunogen:** Synthetic peptide within Human CD20 aa 248-297 / 297.

Positive control: Raji cell lysates, human tonsil tissue, human spleen tissue, B-cell lymphoma tissue.

**Subcellular location:** Cell membrane.

Database links: SwissProt: P11836 Human

Recommended Dilutions:

**WB** 1:1,000-1:5,000 **IHC-P** 1:100-1:500

Storage Buffer: 1\*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

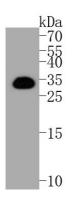
Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

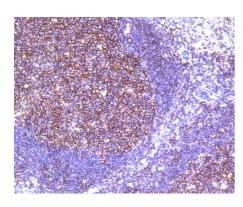
**Purity:** Protein A affinity purified.



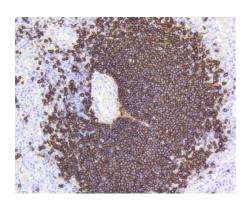
## **Images**



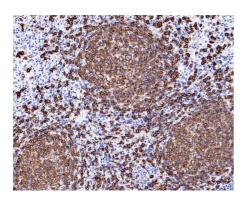
**Fig1:** Western blot analysis of CD20 on Raji cell lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1605-33, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.



**Fig2:** Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-CD20 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-33, 1/200) for 30 minutes 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 spleen tissue using anti-CD20 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-33, 1/200) for 30 minutes 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 B-cell lymphoma tissue using anti-CD20 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-33, 1/200) for 30 minutes 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. Alhejaily A et al. Inactivation of the CDKN2A tumor-suppressor gene by deletion or methylation is common at diagnosis in follicular lymphoma and associated with poor clinical outcome. Clin Cancer Res 20:1676-86 (2014).
- 2. Xiang Z et al. Targeted Activation of Human V 9Vd2-T Cells Controls Epstein-Barr Virus-Induced B Cell Lymphoproliferative Disease. Cancer Cell 26:565-76 (2014).

