

**Localization** – Membrane

**Host Species** – Rabbit

**Ig Class** – IgG1, kappa

**Intended Use**

This antibody is designed for the specific localization of CD19 in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

**Storage & Handling**

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

**Working Principle**

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

**Product Description**

CD19, a 95 kDa transmembrane glycoprotein of the immunoglobulin superfamily, contains two extracellular Ig-like C2-set domains and is expressed throughout B cell ontogeny, except in terminally differentiated plasma cells. It is also present on follicular dendritic cells and certain monocytic lineage-derived myeloid leukemias. Recognized as the earliest and most broadly expressed B cell-specific marker, CD19 is universally present in B cell precursor leukemias. Functionally, CD19 forms a signaling complex with CD21, CD81, Leu13, MHC class II, and the B cell receptor (BCR), serving as a potent coreceptor that amplifies BCR-mediated signaling. CD19 engagement induces tyrosine phosphorylation, intracellular calcium mobilization, and clonal proliferation. Notably, it can initiate signaling independently of BCR co-ligation, acting as a critical hub for multiple pathways that regulate both physiological and malignant B cell responses. CD19 mutations can cause hypogammaglobulinemia, while overexpression contributes to B cell hyperactivity. It is consistently expressed on all peripheral B cells, marked by kappa or lambda light chains.

**Material Supplied**

CD19 antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

**Material required But Not Supplied**

- Xylene
- DI Water
- Control Tissues
- Isopropyl alcohol
- Antigen retrieval buffers
- Hematoxylin
- Positive charged slides
- Blocking Reagents
- Mounting media
- Wash Buffer
- Detection System
- Cover glass

**Working Reagent Procedure**

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

**Recommended Protocol**

Refer the following table for the details on specific recommended protocol for this antibody.

<b>Control Tissue</b>	Tonsil, lymph node	<b>Antibody Incubation Time</b>	30-60 Minutes at RT
<b>Dilution factor</b>	<b>1:20-50</b> (Antibody Diluent: DH144)	<b>Retrieval Pre-treatment</b>	<b>Tris-EDTA based HIER</b> (AR9 Buffer: DH020)

**Precautions**

*This product should be used by qualified and trained professional users only.*

Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contain sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.







**Limitations**

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

**Troubleshooting**

For Technical Support contact us at +91 - 7506501122 or [info@dygnova.com](mailto:info@dygnova.com) or your local distributor to report unusual staining.

Doc No: DH/DS/CD367Rev.00

	Manufacturer Details		Use by Date	<b>LOT</b>	Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use	<b>REF</b>	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	<b>IVD</b>	In-vitro Diagnostic Medical Device