

**Localization** – Cytoplasm

**Host Species** – Mouse

**Ig Class** – IgG

### Intended Use

This antibody is designed for the specific localization of CD163 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

CD163 is a protein encoded by the CD163 gene in humans. It acts as a high-affinity scavenger receptor for the hemoglobin- haptoglobin complex and, with lower affinity, for hemoglobin alone in the absence of haptoglobin. CD163 is exclusively expressed on the surface of human monocytes and macrophages, primarily during the late phase of inflammation, making it valuable for macrophage phenotyping. There is also a soluble form in plasma, sCD163, which is elevated in various inflammatory diseases such as liver cirrhosis, type 2 diabetes, atherosclerosis, and several others. Immunohistochemically, CD163 positivity is seen in histiocytes, Kupffer cells, some alveolar macrophages, placental macrophages, and macrophages in inflamed tissues, including tumors. It is also present in red-pulp macrophages in the spleen and cortical macrophages of the thymus. CD163 distinguishes synovial macrophages from synovial intimal fibroblasts in rheumatoid arthritis more specifically than CD68. It also has a prognostic role in classical Hodgkin's Lymphoma. Elevated CD163 levels are found in microbial infections and myelomonocytic leukemias, indicating its expression is limited to leukemias with monocytic differentiation. Additionally, CD163 positivity has been observed in all cases of synovial-type giant cell tumors of the spinal column.

### Material Supplied

CD163 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
- Isopropyl alcohol
- Positive charged slides
- Wash Buffer
- DI Water
- Antigen retrieval buffers
- Blocking Reagents
- Detection System
- Control Tissues
- Hematoxylin
- Mounting media
- 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>	Skin, Lung, Placenta or Histiocytoma	<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

Doc No: DH/DS/CD365Rev.00

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



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	Temperature Limits		Sufficient for 'n' assays / tests	<b>IVD</b>	In-vitro Diagnostic Medical Device