

**Mouse Anti-CD15 [Carb-3]: MC0287, MC0287RTU7**

**Intended Use:** For Research Use Only

**Description:** CD15 is a complex cluster of cell surface glycoproteins and glycolipids with a common trisaccharide structure, 3-fucosyl-N-acetylactosamine (3-FL), also referred to as Lewis X (LeX) antigen. This antigen is involved in neutrophil functions such as, cell-cell interactions, phagocytosis, stimulation of degranulation and respiratory burst. The CD15 is expressed in Reed-Sternberg cells, myeloid cells as well as epithelial cells. CD15 antibody has been used as an immunohistochemical marker to identify Reed-Sternberg cells (RSC) in Classical Hodgkin Lymphoma (CHL). CD15 is expressed on Reed-Sternberg cells of Hodgkin's disease and by various other cell types including myeloid cells and epithelial cells. Antibodies to CD15 recognize a pentasaccharide sequence occurring in lacto-N-fucopentaose III ceramide (also referred to as X hapten of Lex) found in higher glycolipids and glycoproteins. A review by Arber et al. has reported that antibodies to CD15 demonstrate positive staining in 87% of Hodgkin's disease including nodular sclerosing, mixed cellularity, and lymphocyte depletion, whereas the lymphocyte predominant variant exhibits a lower rate of positivity (37%). Among non-Hodgkin's lymphoma, 13% express CD15 including 4.1% B-cell, 21% T-cell, and 17% null-cell. CD15 expression has also been demonstrated in acute myeloid leukemia (65%) and chronic myelogenous leukemia (96% chronic phase and 54% blast phase). A relatively low level of CD15 expression has been reported in acute lymphoblastic leukemia (5.7% overall) with positivity observed in 7.7% common or precursor B-cell, 0% B-cell, 7.7% T-cell and 17.3% null-cell. Carcinomas derived from various organs have also been shown to be CD15 positive (56%) including adenocarcinomas, squamous cell carcinomas and undifferentiated large and small cell carcinomas.

**Specifications:**

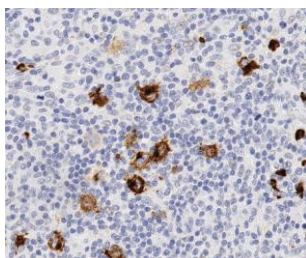
Clone: Carb-3  
 Source: Mouse  
 Isotype: IgM  
 Reactivity: Human  
 Localization: Cytoplasm, membrane  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
CD15 Concentrated	MC0287	1 ml
CD15 Prediluted	MC0287RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Tonsil, Hodgkin's lymphoma  
 Concentrated Dilution: 25-50  
 Pretreatment: EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human Hodgkin's lymphoma stained with anti-CD15 using DAB

**References**

1. Carb-3 is the superior anti-CD15 monoclonal antibody for immunohistochemistry. Røge R1, et al. Appl Immunohistochem Mol Morphol. Jul;22(6):449-58, 2014.

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Rev. A