**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-acetyllactosamine (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**: Purified ascites in PBS pH7.4, containing BSA1, and ≤0.09% sodium azide (NaN3).
- **Storage**: Store at 2°- 8°C
- **Applications**: IHC
- **Package**:
  - 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.

**References**

Doc. 100- MC0287
Rev. A