CD15 (C3D-1): sc-19648

**BACKGROUND**

Fucosyltransferases (FucTs) catalyze the covalent association of fucose to different positional linkages on sugar acceptor molecules. The carbohydrate moieties that are generated are covalently attached to cell surfaces and are necessary to ensure a surface contour that satisfies a variety of physiological roles. CD15, also known as Lewis X or Le\(^a\), is a carbohydrate antigen that is generated by FucT-IV (\(\alpha\,1,3\)-fucosyltransferase IV). Commonly found on the surface of leukocytes and some tumor cells, CD15 is a trisaccharide that is synthesized when FucT-IV transfers an \(\alpha\)-fucose residue onto the \(\beta\)-GlcNAc moiety of cellular N-acetyllactosamines. CD15 functions as an adhesion molecule capable of calcium-mediated homotypic binding. Cells with high surface expression of CD15, therefore, exhibit strong self-aggregation (based on CD15-CD15 interaction) in the presence of calcium. Additionally, CD15 is thought to be a ligand for selectins (proteins involved in mediating leukocyte-specific cellular interactions), further supporting its role as a cell-adhesion protein.

**CHROMOSOMAL LOCATION**

Genetic locus: FUT4 (human) mapping to 11q21; Fut4 (mouse) mapping to chromosome 6.

**SOURCE**

CD15 (C3D-1) is a mouse monoclonal antibody raised against purified neutrophils of human origin.

**PRODUCT**

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD15 (C3D-1) is available conjugated to either fluorescein (sc-19648 FITC) or Alexa Fluor® 488 (sc-19648 AF488), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

In addition, CD15 (C3D-1) is available conjugated to either PerCP (sc-19648 PerCP) or PerCP-Cy5.5 (sc-19648 PC5C5), 100 tests in 2 ml, for IF, IHC(P) and FCM.

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**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**APPLICATIONS**

CD15 (C3D-1) is recommended for detection of CD15 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

Positive Controls: F9 cell lysate: sc-2245, H69AR whole cell lysate: sc-364382 or mouse kidney extract: sc-2255.

**RECOMMENDED SUPPORT PRODUCTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4°C, **“DO NOT FREEZE”**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.