

8D6 (S-16): sc-54155

BACKGROUND

The 8D6 protein, also known as 8D6A, CD320 or FDC-SM-8D6, is a single pass, type I membrane protein with two low-density lipoprotein receptor ligand binding repeats (LDL-A modules). It is expressed by follicular dendritic cells in the germinal center and acts as a stimulatory signaling molecule. Follicular dendritic cells and T cells interact with germinal center B cells, providing signals for survival, proliferation and differentiation into memory B cells and plasma cells. A disruption of this interaction results in apoptosis of B cells. 8D6 is a growth factor required for plasma cell generation from germinal center B cells. Protein 8D6, together with HCAM (or CD44), plays a significant role in the proliferation of lymphoma cells of germinal center origin. 8D6 is responsible for enhancing proliferation while HCAM inhibits apoptosis.

REFERENCES

1. Shaw, M.A. 1987. Monoclonal anti-LWab and anti-D reagents recognize a number of different epitopes. Use of red cells of non-human primates. *J. Immunogenet.* 13: 377-386.
2. Itohara, S., et al. 1989. Monoclonal antibodies specific to native murine T cell receptor $\gamma\delta$: analysis of $\gamma\delta$ T cells during thymic ontogeny and in peripheral lymphoid organs. *Proc. Natl. Acad. Sci. USA* 86: 5094-5098.
3. Kirsch, A.H., et al. 1997. The pattern of expression of CD147/neurothelin during human T cell ontogeny as defined by the monoclonal antibody 8D6. *Tissue Antigens* 50: 147-152.
4. Li, L., et al. 2000. Identification of a human follicular dendritic cell molecule that stimulates germinal center B cell growth. *J. Exp. Med.* 191: 1077-1084.
5. Zhang, X., et al. 2001. The distinct roles of T cell-derived cytokines and a novel follicular dendritic cell-signaling molecule 8D6 in germinal center B cell differentiation. *J. Immunol.* 167: 49-56.
6. Choi, Y.S., et al. 2003. A workshop on the marrow microenvironment and hematological malignancy. *Cancer Res.* 63: 7539-7541.

CHROMOSOMAL LOCATION

Genetic locus: CD320 (human) mapping to 19p13.2.

SOURCE

8D6 (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of 8D6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54155 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

8D6 (S-16) is recommended for detection of 8D6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for 8D6 siRNA (h): sc-106884, 8D6 shRNA Plasmid (h): sc-106884-SH and 8D6 shRNA (h) Lentiviral Particles: sc-106884-V.

Molecular Weight (predicted) of 8D6: 29 kDa.

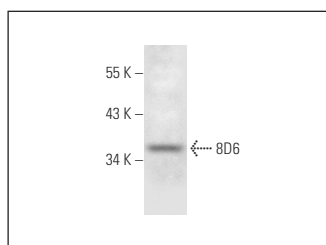
Molecular Weight (observed) of 8D6: 38 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



8D6 (S-16): sc-54155. Western blot analysis of 8D6 expression in U-251-MG whole cell lysate.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
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Guaranteed

Try **8D6 (F-12): sc-393892**, our highly recommended monoclonal alternative to 8D6 (S-16).