

# 8D6 (F-12): sc-393892

## 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

- 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.
- Itoharu, 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.
- 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.
- 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.
- 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

8D6 (F-12) is a mouse monoclonal antibody raised against amino acids 152-282 mapping at the C-terminus of 8D6 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

8D6 (F-12) is available conjugated to agarose (sc-393892 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393892 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393892 PE), fluorescein (sc-393892 FITC), Alexa Fluor® 488 (sc-393892 AF488), Alexa Fluor® 546 (sc-393892 AF546), Alexa Fluor® 594 (sc-393892 AF594) or Alexa Fluor® 647 (sc-393892 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393892 AF680) or Alexa Fluor® 790 (sc-393892 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

8D6 (F-12) is recommended for detection of 8D6 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2  $\mu$ g per 100-500  $\mu$ 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.

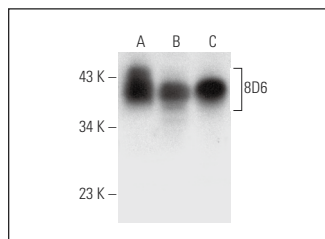
Positive Controls: COLO 320DM cell lysate: sc-2226, SW480 cell lysate: sc-2219 or NCI-H929 whole cell lysate: sc-364786.

## RECOMMENDED SUPPORT REAGENTS

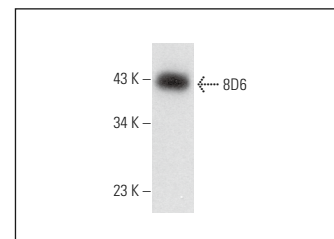
To ensure optimal results, the following support reagents are recommended:

- Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



8D6 (F-12): sc-393892. Western blot analysis of 8D6 expression in NCI-H929 (A), COLO 320DM (B) and U-251-MG (C) whole cell lysates.



8D6 (F-12): sc-393892. Western blot analysis of 8D6 expression in SW480 whole cell lysate.

## SELECT PRODUCT CITATIONS

- Lin, X.H., et al. 2023. Six immune-related promising biomarkers may promote hepatocellular carcinoma prognosis: a bioinformatics analysis and experimental validation. *Cancer Cell Int.* 23: 52.

## STORAGE

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

## RESEARCH USE

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