

CD67 (N-12): sc-34404

BACKGROUND

Carcinoembryonic antigen-related cell adhesion molecule 8, also designated CD67, CD66b or nonspecific cross-reacting antigen (NCA-95), belongs to the human carcinoembryonic antigen (CEA) family. The CD67 antigen is encoded by the CEACAM8 (CGM6) gene, which is exclusively expressed in neutrophils and eosinophils. In neutrophils, the CEACAM8 gene is primarily detected in the secondary granules within the cytoplasm, but it can also be found in lower amounts on the plasma membrane. The amount of CD67 on the plasma membrane is up-regulated upon granulocyte activation. CD67 has been located on the surface of neutrophilic and eosinophilic granulocytes at late stages of differentiation. It exhibits heterophilic cell adhesion properties with CD66c, which is coexpressed with CD67 in granulocytes. CD67, which is attached to the membrane by a GPI-anchor, is expressed in leukocytes of chronic myeloid leukemia patients and bone marrow and in granulocytes in the spleen, thymus and lungs.

REFERENCES

1. Buchegger, F., et al. 1984. Monoclonal antibodies identify a CEA cross-reacting antigen of 95 kDa (NCA-95) distinct in antigenicity and tissue distribution from the previously described NCA of 55 kDa. *Int. J. Cancer* 33: 643-649.
2. Arakawa, F., et al. 1990. Characterization of a cDNA clone encoding a new species of the nonspecific cross-reacting antigen (NCA), a member of the CEA gene family. *Biochem. Biophys. Res. Commun.* 166: 1063-1071.
3. Thompson, J.A., et al. 1991. Carcinoembryonic antigen gene family: molecular biology and clinical perspectives. *J. Clin. Lab. Anal.* 5: 344-366.
4. Felzmann, T., et al. 1991. Analysis of function-associated receptor molecules on peripheral blood and synovial fluid granulocytes from patients with rheumatoid and reactive arthritis. *J. Clin. Immunol.* 11: 205-212.
5. Kuroki, M., et al. 1992. Augmented expression and release of nonspecific cross-reacting antigens (NCAs), members of the CEA family, by human neutrophils during cell activation. *J. Leukoc. Biol.* 52: 551-557.
6. Hauck, W., et al. 1994. Transcriptional control of the human biliary glycoprotein gene, a CEA gene family member down-regulated in colorectal carcinomas. *Eur. J. Biochem.* 223: 529-541.

CHROMOSOMAL LOCATION

Genetic locus: CEACAM8 (human) mapping to 19q13.2.

SOURCE

CD67 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CD67 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-34404 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD67 (N-12) is recommended for detection of CD67 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD67 siRNA (h): sc-45465, CD67 shRNA Plasmid (h): sc-45465-SH and CD67 shRNA (h) Lentiviral Particles: sc-45465-V.

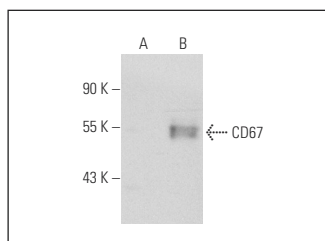
Molecular Weight of CD67: 95 kDa.

Positive Controls: CD67 (h): 293T Lysate: sc-175243.

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).

DATA



CD67 (N-12): sc-34404. Western blot analysis of CD67 expression in non-transfected: sc-117752 (A) and human CD67 transfected: sc-175243 (B) 293T whole cell lysates.

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.

MONOS
Satisfaction
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Try **CD67 (GM2H6): sc-101383** or **CD67 (G10F5): sc-53673**, our highly recommended monoclonal alternatives to CD67 (N-12).