SANTA CRUZ BIOTECHNOLOGY, INC.

NK Cell Marker (ANK44): sc-59339

BACKGROUND

Natural killer (NK) cells are large, granular, bone-marrow derived lymphocytes and are a component of innate immune defense. They are activated in response to interferons or macrophage-derived cytokines. Rather than destroying the attacking microorganisms directly, NK cells attack cells that have been infected by the microbes. NK cells contain special proteins in their cytoplasm, such as proteases called granzymes, as well as Perforin. Perforin makes pores in the target cell membrane, allowing the granzymes, water and ions to diffuse into the cell. This causes expansion of the cell until it eventually lyses under pressure. Individuals who lack NK cells are highly susceptible to early phases of herpes virus infection.

REFERENCES

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SOURCE

NK Cell Marker (ANK44) is a mouse monoclonal antibody raised against IL-2-activated cultured NK cells of rat origin.

PRODUCT

Each vial contains 50 µg IgG_1 in 500 µl PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

NK Cell Marker (ANK44) is recommended for detection of NK cells after IL-2-activation of rat origin by 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 flow cytometry (1 µg per 1 x 10^6 cells); non cross-reactive with unstimulated NK cells, α-β-TCR T cells or B cells; may cross-react with rat γ δ-TCR T cells.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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