

Natural Killer Cell (H25): sc-53384

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 herpesvirus infection.

REFERENCES

- Bai, Y., et al. 1983. Two monoclonal antibodies identifying a subset of human peripheral mononuclear cells with natural killer cell activity. *Eur. J. Immunol.* 13: 521-527.
- Körfer, A., et al. 1989. Immunophenotypic demonstration of two natural killer surface markers, H25 and H366, on fresh human leukemic cells. *Acta Haematol.* 82: 193-196.
- Robertson, M.J. and Ritz, J. 1991. Biology and clinical relevance of human natural killer cells. *Blood* 76: 2421-2438.
- Biron, C.A. 1997. Activation and function of natural killer cell responses during viral infections. *Curr. Opin. Immunol.* 9: 24-34.
- Brown, M.G., et al. 1997. The natural killer gene complex: a genetic basis for understanding natural killer cell function and innate immunity. *Immunol. Rev.* 155: 53-65.
- Leibson, P.J. 1997. Signal transduction during natural killer cell activation: inside the mind of a killer. *Immunity* 6: 655-661.
- Lanier, L.L. 2001. On guard-activating NK cell receptors. *Nat. Immunol.* 2: 23-27.
- Cooper, M.A., et al. 2001. The biology of human natural killer-cell subsets. *Trends Immunol.* 22: 633-640.

SOURCE

Natural Killer Cell (H25) is a mouse monoclonal antibody raised against HSE-2 cell line of human origin.

PRODUCT

Each vial contains 200 µg IgG₁/IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Natural Killer Cell (H25) is available conjugated to agarose (sc-53384 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53384 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53384 PE), fluorescein (sc-53384 FITC), Alexa Fluor[®] 488 (sc-53384 AF488), Alexa Fluor[®] 546 (sc-53384 AF546), Alexa Fluor[®] 594 (sc-53384 AF594) or Alexa Fluor[®] 647 (sc-53384 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53384 AF680) or Alexa Fluor[®] 790 (sc-53384 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Natural Killer Cell (H25) is recommended for detection of NK cells of human origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

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.

PROTOCOLS

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

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA