SANTA CRUZ BIOTECHNOLOGY, INC.

ICEBERG (N-18): sc-14207

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ICEBERG is a member of the death-domain-fold superfamily that is induced by proinflammatory stimuli. Primarily expressed in the heart and placenta, ICEBERG inhibits the generation of IL-1 beta which blocks apoptosis during an inflammatory stimulus. ICEBERG inhibits IL-1 beta by associating with caspase-1, thereby preventing caspase-1 from interacting with the pro-apoptotic protein RIP2. The association of ICEBERG with caspase-1 is facilitated by the charge-charge interactions between the prodomain of caspase-1 and the surface charge of ICEBERG. The association of caspase-1 with RIP2 will inhibit apoptosis by generating IL-1 beta. However, the association of caspase-1, which serves both pro and antiapoptotic roles, with ICEBERG induces apoptosis by inhibiting the generation of IL-1 beta.

REFERENCES

1. Watson, R.W., et al. 1998. The IL-1 beta-converting enzyme (caspase-1) inhibits apoptosis of inflammatory neutrophils through activation of IL-1 beta. J. Immunol. 161: 957-962.
2. McCarthy, J.V., et al. 1998. RIP2 is a novel NF-kappaB-activating and cell death-inducing kinase. J. Biol. Chem. 273: 16968-16975.
3. Pazdernik, N.J., et al. 1999. Mouse receptor interacting protein 3 does not contain a caspase-recruiting or a death domain but induces apoptosis and activates NF-kappaB. Mol. Cell. Biol. 19: 6500-6508.
4. Laliberte, R.E., et al. 1999. ATP treatment of human monocytes promotes caspase-1 maturation and externalization. J. Biol. Chem. 274: 36944-36951.
5. Humke, E.W., et al. 2000. ICEBERG: a novel inhibitor of interleukin-1 beta generation. Cell 103: 99-111.

SOURCE

ICEBERG (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ICEBERG 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-14207 P, (100 µg 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.

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.

APPLICATIONS

ICEBERG (N-18) is recommended for detection of ICEBERG of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ICEBERG siRNA (h): sc-105550.

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) 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.