SANTA CRUZ BIOTECHNOLOGY, INC.

NGAL (6B4): sc-57518

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

In addition to the monomeric mammalian progelatinase, two additional forms of progelatinase have been identified. The shorter of these additional forms is a covalently linked, disulfide-bridged protein that heterodimerizes with a short protein; an α2-Microglobulin-related protein known as neutrophil gelatinase-associated lipocalin (NGAL), which is moderately expressed in breast and lung tissues. NGAL belongs to the lipocalin family and has a high degree of similarity with rat α2-Microglobulin-related protein and mouse protein 24p3. NGAL is able to bind a derivative of the bacterial chemotactic peptide, suggesting that it has important immuno-modulatory functions. NGAL has been described as an inflammatory protein; it is released into the circulation as a result of the inflammatory activation of leukocytes initiated by the extra-corporeal circulation. In addition, NGAL synthesis is induced in epithelial cells in inflammatory and neoplastic colorectal diseases. In conclusion, NGAL may serve as a scavenger of bacterial products to function in the anti-inflammatory process.

REFERENCES

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6. Jonsson, P., et al. 1999. Extracorporeal circulation causes release of neutrophil gelatinase-associated lipocalin (NGAL). Mediators Inflamm. 8: 169-171.
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8. Hirsch, R., et al. 2007. NGAL is an early predictive biomarker of contrast-induced nephropathy in children. Pediatr. Nephrol. 22: 2089-2095.
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CHROMOSOMAL LOCATION

Genetic locus: LCN2 (human) mapping to 9q34.11.

RESEARCH USE

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

SOURCE

NGAL (6B4) is a mouse monoclonal antibody raised against NGAL from neutrophils of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NGAL (6B4) is recommended for detection of NGAL of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for NGAL siRNA (h): sc-43969, NGAL shRNA Plasmid (h): sc-43969-SH and NGAL shRNA (h) Lentiviral Particles: sc-43969-V.

Molecular Weight of NGAL: 23 kDa.

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 for detailed protocols and support products.