SANTA CRUZ BIOTECHNOLOGY, INC.

Cosmc (h): 293T Lysate: sc-116086

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cosmc, or C1GALT1-specific chaperone 1, is a 318 amino acid protein encoded by the human gene C1GALT1C1. Cosmc is believed to be a chaperone required for the generation of 1 O-glycan Gal-β1-3GalNAc-α1-Ser/Thr (Tn antigen), which is a precursor for many extended O-glycans in glycoproteins. Cosmc may also function as a specific molecular chaperone assisting the folding/stability of core 1 β-3-galactosyltransferase (C1GALT1). Cosmc is a single-pass type II membrane protein. Cosmc is ubiquitously expressed in all tissue types. It is most abundantly expressed in small intestine, stomach, salivary gland, kidney and testis, and at intermediate levels in whole brain, cerebellum, spinal cord, thymus, spleen, trachea, lung, pancreas, ovary and uterus. Defects in C1GALT1C1 are the cause of Tn syndrome, a rare autoimmune disease caused by somatic mutation in the C1GALT1C1 gene in which subpopulations of blood cells of all lineages carry an incompletely glycosylated Tn antigen, effecting red cells and platelets and leading to anemia, leukopenia and thrombocytopenia. Tn-polyagglutinability is sometimes associated with leukemia or is a preleukemic state.

REFERENCES

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: C1GALT1C1 (human) mapping to Xq24.

PRODUCT

Cosmc (h): 293T Lysate represents a lysate of human Cosmc transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Cosmc (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Cosmc antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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.