SANTA CRUZ BIOTECHNOLOGY, INC.

CTBS (RF-18): sc-100489

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CTBS (di-N-acetylchitobiase), also known as CTB (chitobiase), is an evolutionarily conserved member of the glycosyl hydrolase 18 family of proteins. Localizing to the lysosome, CTBS plays a role in the degradation of asparagine-linked (Asn-linked) glycoproteins. Glycoproteins are translocated to lysosomes via endocytosis or autophagy where they are broken down by proteases and glycosidases. The catabolism of glycoproteins is an important step in the regular turnover of cellular contents and in maintaining the homeostasis of glycosylation. CTBS functions as a glycosidase that cleaves the reducing end GlcNAc from the core chitobiase unit of oligosaccharides. Before this reaction can occur, AGA (the lysosomal glycosylasparaginase) must first remove the Asn from the Asn-linked glycoprotein to expose the reducing end GlcNAc, thereby allowing CTBS to access the exposed moiety.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: CTBS (human) mapping to 1p22.3.

SOURCE

CTBS (RF-18) is a mouse monoclonal antibody raised against recombinant CTBS of human origin.

PRODUCT

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

APPLICATIONS

CTBS (RF-18) is recommended for detection of CTBS of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CTBS siRNA (h): sc-88058, CTBS shRNA Plasmid (h): sc-88058-SH and CTBS shRNA (h) Lentiviral Particles: sc-88058-V.

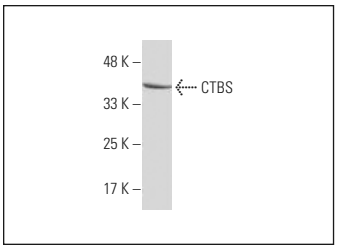
Molecular Weight of CTBS: 40 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CTBS (RF-18): sc-100489. Western blot analysis of CTBS expression in MCF7 whole cell lysate.

RESEARCH USE

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