SANTA CRUZ BIOTECHNOLOGY, INC.

# GLB1L3 (T-12): sc-138310

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

GLB1L3 (β-galactosidase-1-like protein 3) is a 653 amino acid protein belonging to the glycosyl hydrolase 35 family. GLB1L3 exists as three alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 11q25. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

## REFERENCES


1. Grossfeld, P.D., et al. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. Am. J. Med. Genet. A. 129A: 51-61.
2. Zehelein, J., et al. 2006. Skipping of Exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. J. Biol. Chem. 281: 35397-35403.
3. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. Nature 440: 497-500.
4. Ataga, K.I., et al. 2007. β-thalassaemia and sickle cell anaemia as paradigms of hypercoagulability. Br. J. Haematol. 139: 3-13.
5. Berger, A.C., et al. 2007. The subcellular localization of the Niemann-Pick Type C proteins depends on the adaptor complex AP-3. J. Cell Sci. 120: 3640-3652.
6. Lee, J.H., et al. 2007. Activation and regulation of ATM kinase activity in response to DNA double-strand breaks. Oncogene 26: 7741-7748.
7. O'Connor, M.J., et al. 2007. Targeted cancer therapies based on the inhibition of DNA strand break repair. Oncogene 26: 7816-7824.
8. Kaste, S.C., et al. 2008. Wilms tumour: prognostic factors, staging, therapy and late effects. Pediatr. Radiol. 38: 2-17.
9. Guyonnet, B., et al. 2009. The adult boar testicular and epididymal transcriptomes. BMC Genomics 10: 369.


## CHROMOSOMAL LOCATION

Genetic locus: GLB1L3 (human) mapping to 11q25.

## SOURCE

GLB1L3 (T-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of GLB1L3 of human origin.

## 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 or our catalog for detailed protocols and support products.

## PRODUCT

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

Blocking peptide available for competition studies, sc-138310 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GLB1L3 (T-12) is recommended for detection of GLB1L3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with GLB1L or GLB1L2.

Suitable for use as control antibody for GLB1L3 siRNA (h): sc-96543, GLB1L3 shRNA Plasmid (h): sc-96543-SH and GLB1L3 shRNA (h) Lentiviral Particles: sc-96543-V.

Molecular Weight of GLB1L3 isoform 1: 75 kDa.

Molecular Weight of GLB1L3 isoform 2: 36 kDa.

Molecular Weight of GLB1L3 isoform 3: 35 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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