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# GalNAc-TL5 (h2): 293T Lysate: ssc-176166

## BACKGROUND

The UDP-N-acetyl- $\alpha$ -D-galactosamine:polypeptide N-acetylgalactosaminyltransferase (GalNAc-T) family of enzymes are substrate-specific proteins that catalyze the transfer of GalNAc (N-acetylgalactosaminyl) to serine and threonine residues onto various proteins, thereby initiating mucin-type O-linked glycosylation in the Golgi apparatus. GalNAc-TL5 (polypeptide GalNAc transferase 15), also known as GALNTL5, is a 443 amino acid single-pass type II membrane protein belonging to the glycosyltransferase 2 family and GalNAc-T subfamily. Localizing to Golgi apparatus, GalNAc-TL4 utilizes manganese and calcium as cofactors and is expressed in testis. GalNAc-TL5 may assist with the transfer of an N-acetyl-D-galactosamine residue to a serine or threonine residue on protein receptors and likely catalyzes the initial reaction in O-linked oligosaccharide biosynthesis. Unlike other members of the GalNAc-T subfamily, GalNAc-TL5 does not contain a C-terminal ricin B-type lectin domain. GalNAc-TL5 contains two conserved domains located in its glycosyltransferase region. The N-terminal domain, also known as domain A or GT1 motif, may be involved in manganese coordination and substrate binding while the C-terminal domain, also known as domain B or Gal/GalNAc-T motif, is likely involved in catalytic reactions and UDP-Gal binding. GalNAc-TL5 exists as two alternatively spliced isoforms.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: GALNTL5 (human) mapping to 7q36.1.

## PRODUCT

GalNAc-TL5 (h2): 293T Lysate represents a lysate of human GalNAc-TL5 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

GalNAc-TL5 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive GalNAc-TL5 antibodies. Recommended use: 10-20  $\mu$ l per lane.

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

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.