

# Anti-GalNAc-T1 [UH3]

**Catalogue number:** 155104

**Sub-type:** Primary antibody

**Images:**

## Contributor

**Inventor:**

**Institute:** University of Copenhagen

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** Anti-GalNAc-T1 [UH3]

**Alternate name:** UH3, 4D8

**Class:** Monoclonal

**Conjugate:** Unconjugated

**Description:** GalNAc-T1 is one of many polypeptide GalNAc-transferases that attach GalNAc to proteins forming the GalNAc-1-O-Ser/Thr linkage for GalNAc-type O-glycosylation. The GalNAc-transferase isoforms have considerably overlapping functions as well as unique distinct functions. GalNAc-T1 and GalNAc-T2 are the main contributors to O-glycosylation of peptides in most cells and they have distinct functions. Murine knock out studies demonstrate that GalNAc-T1 plays important roles in B-cell differentiation. GalNAc-T1 has also been implicated in carcinogenesis. O-glycans are important biomarkers in cancer. The truncated O-glycans comprising Tn formed by the GalNAc transferases and T formed by further elongation by the core1 synthase (C1GalT1) are widely recognized as pancarcinoma antigens. They are masked by sialic acid or further elongation or branching in normal cells. Validation: 1. Positive reaction (IC/IF) in cells expressing GalNAc-T1 using close isoforms as negative controls e.g. GalNAc-T13. 2. Selective IP of active GalNAc-T1 from total cell extracts. 3. Distinct perinuclear staining in cell lines (ICC/IF) and tissues (IHC, IF) suggestive of Golgi localization. 4. loss of staining (IC/IF) following KO of GalNAc-T1

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:**

**Gender:**

**Isotype:** IgG1

**Reactivity:** Human

**Selectivity:**

**Host:** Mouse

**Immunogen:** Catalytically active secreted GalNAc-T1 produced in insect cells. Recombinant protein containing aa. 41-559 (Uniprot isoform-1)

**Immunogen UNIPROT ID:** Q10472

**Sequence:**

**Growth properties:**

**Production details:**

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:**

## Target details

**Target:** GalNAc-T1/GALNT1

**Target alternate names:**

**Target background:** GalNAc-T1 is one of many polypeptide GalNAc-transferases that attach GalNAc to proteins forming the GalNAc1-O-Ser/Thr linkage for GalNAc-type O-glycosylation. The GalNAc-transferase isoforms have considerably overlapping functions as well as unique distinct functions. GalNAc-T1 and T2 are the main contributors to O-glycosylation of peptides in most cells and they have distinct functions. Murine knock out studies demonstrate that GalNAc-T1 plays important roles in B-cell differentiation. GalNAc-T1 has also been implicated in carcinogenesis. O-glycans are important biomarkers in cancer. The truncated O-glycans comprising Tn formed by the GalNAc transferases and T formed by further elongation by the core1 synthase (C1GalT1) are widely recognized as pancarcinoma antigens. They are masked by sialic acid or further elongation or branching in normal cells. Validation: 1. Positive reaction (IC/IF) in cells expressing GalNAc-T1 using close isoforms as negative controls e.g. GalNAc-T13. 2. Selective IP of active GalNAc-T1 from total cell extracts. 3. Distinct perinuclear staining in cell lines (ICC/IF) and tissues (IHC, IF) suggestive of Golgi localization. 4. loss of staining (IC/IF) following KO of GalNAc-T1

**Molecular weight:**

**Ic50:**

## Applications

**Application:** ELISA ; IHC ; IF ; IP

**Application notes:**

## Handling

**Format:** Liquid  
**Concentration:** 0.9-1.1 mg/ml  
**Passage number:**  
**Growth medium:**  
**Temperature:**  
**Atmosphere:**  
**Volume:**  
**Storage medium:**  
**Storage buffer:** PBS with 0.02% azide  
**Storage conditions:** -15° C to -25° C  
**Shipping conditions:** Shipping at 4° C

## Related tools

**Related tools:**

## References

**References:**

CancerTools.org