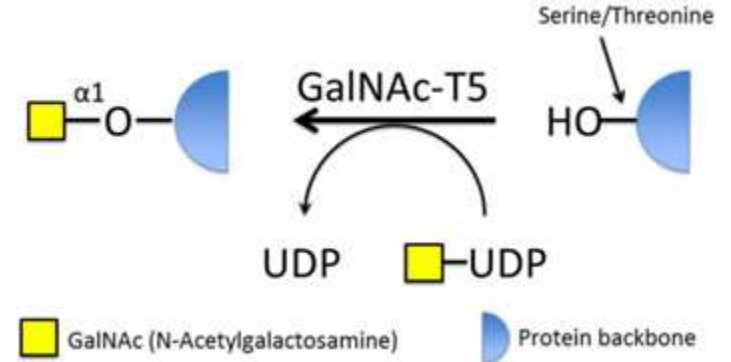


## GalNAc-T5, soluble fragment, Human Recombinant

<b>CATALOG NO:</b>	P1217-5	5 µg
<b>ALTERNATE NAMES:</b>	Polypeptide N-acetylgalactosaminyltransferase 5, Polypeptide GalNAc transferase 5, GalNTase 5	
<b>SOURCE:</b>	Insect Cells	
<b>PURITY:</b>	> 95% by SDS - PAGE	
<b>FORM:</b>	Liquid	
<b>FORMULATION:</b>	Sterile filtered solution in 25 mM Tris pH 7.5 and 150 mM NaCl, at a stock concentration of 477 µg/ml.	
<b>STORAGE CONDITIONS:</b>	Stable for 4 weeks at 4°C. Stable for 6 months at -80°C. Avoid repeated freeze-thaw cycles.	
<b>DESCRIPTION:</b>	<p>Polypeptide N-acetylgalactosaminyltransferase 5 (GalNAc-T5) catalyzes the transfer of N-acetylgalactosamine (GalNAc) from UDP-GalNAc to the hydroxyl group of serine and threonine residues, and was first cloned from rat. Twenty GalNAc-T genes have been identified in humans and most have been shown to represent active GalNAc-Ts. All isoforms are type II transmembrane proteins, with different but partly overlapping substrate preferences. The GalNAc-Ts control the initiation of mucin-type O-linked glycosylation and determine the location and density of O-glycans in a protein. Addition of GalNAc to an unglycosylated Ser/Thr residue creates the Tn antigen GalNAc<math>\alpha</math>1-S/T, and subsequent addition of sialic acid by ST6GalNAc-I forms the cancer associated STn antigen. GalNAc-T5 expression pattern is highly regulated, and is most abundant in salivary glands. GalNAc-T5 has a preference for unglycosylated or monoglycosylated substrates.</p>	
<b>BIOLOGICAL ACTIVITY:</b>	<p>Specific activity &gt;500 pmol/min/ug. Measured by transfer of N-acetylgalactosamine (GalNAc) from UDP-Gal to the peptide EA2, as measured with a phosphatase-coupled assay. Coupling assay reactions contained: 50 mM Tris pH 7.5, 2 mM MnCl<sub>2</sub>, 0.5 mM UDP-GalNAc, 0.25 mM EA2, 4 µg/mL ENTPD3/CD39L3, and 6 µg/mL GalNAc-T5 (seriallyly diluted 1:2 for 3pts). Incubated at 37°C for 30 min.</p>	



### RELATED PRODUCT:

- GalNAc-T2, soluble fragment, Human Recombinant (**Cat. No. P1215**)
- GalNAc-T3, soluble fragment, Human Recombinant (**Cat. No. P1216**)
- GalNAc-T16, soluble fragment, Human Recombinant (**Cat. No. P1218**)
- B3GNT6, soluble fragment, Human Recombinant (**Cat. No. P1219**)
- B4GalT1, soluble fragment, Human Recombinant (**Cat. No. P1220**)
- ST6GalNAc1, soluble fragment, Human Recombinant (**Cat. No. P1221**)
- ST3Gal1, soluble fragment, Human Recombinant (**Cat. No. P1222**)

**FOR RESEARCH USE ONLY! Not to be used on humans.**