

MUC5AC**Cat. No.:** RP20290**Size:** 1 mg**Description:**

There is a ninth member of the mammalian UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase (ppGaNTase) family, termed ppGaNTase-T9. This enzyme is expressed in a broadly distributed manner across many adult tissues. Significant levels of 5- and 4.2-kilobase transcripts were found in rat sublingual gland, testis, small intestine, colon, and ovary, with lesser amounts in heart, brain, spleen, lung, stomach, cervix, and uterus. In situ hybridization to mouse embryos (embryonic day 14.5) revealed significant hybridization in the developing mandible, maxilla, intestine, and mesencephalic ventricle. Constructs expressing this gene transiently in COS7 cells resulted in no detectable transferase activity in vitro against a panel of unmodified peptides, including MUC5AC (GTPSPVPTTSTTSAP) and EA2 (PTTDSTTPAPTTK). However, when incubated with MUC5AC and EA2 glycopeptides (obtained by the prior action of ppGaNTase-T1), additional incorporation of GalNAc was achieved, resulting in new hydroxyamino acid modification. The activity of this glycopeptide transferase is distinguished from that of ppGaNTase-T7 in that it forms a tetra-glycopeptide species from the MUC5AC tri-glycopeptide substrate, whereas ppGaNTase-T7 forms a hexa-glycopeptide species.

Sequence (one-letter code):

GTPSPVPTTSTTSAP

Sequence (three-letter code):

{Gly}{Thr}{Thr}{Pro}{Ser}{Pro}{Val}{Pro}{Thr}{Thr}{Ser}{Thr}{Thr}{Ser}{Ala}{Pro}

Formula: C₆₃H₁₀₄N₁₆O₂₆**Molecular Weight:** 1,501.62**Storage:**

Store at -20°C. Keep tightly closed. Store in a cool dry place.

Note:

*For Non-Clinical Research Use Only *

