B4GalT1, soluble fragment, Human Recombinant

CATALOG NO: P1222-5 5 µg

ALTERNATE NAMES: Beta-1,4-galactosyltransferase 1, UDP-Gal:beta-GlcNAc beta-1,4-galactosyltransferase 1, UDP-galactose:beta-N-acetylglucosamine beta-1,4-galactosyltransferase 1, Beta-1,4-GalTase 1, Beta4Gal-T1

SOURCE: Insect Cells

PURITY: > 90% by SDS - PAGE

MOL. WEIGHT: 35 kDa

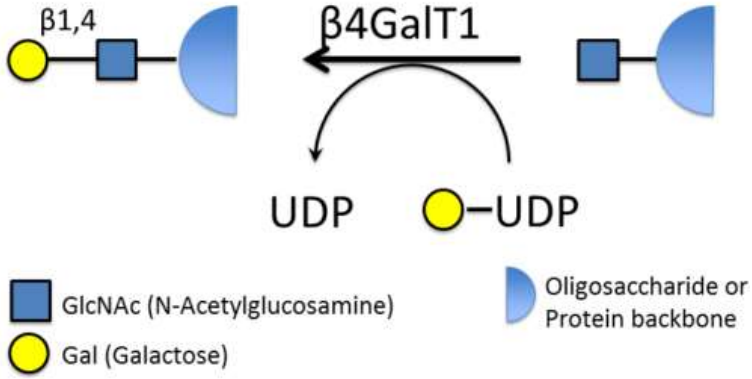
FORM: Liquid

FORMULATION: Sterile filtered solution in 25 mM Tris pH 7.5 and 150 mM NaCl, at a stock concentration of 440 ug/ml.

STORAGE CONDITIONS: Stable for 4 weeks at 4ºC. Stable for 6 months at -80ºC. Avoid repeated freeze-thaw cycles.

DESCRIPTION: β1,4-galactosyltransferase 1 was the first mammalian glycosyltransferase to be isolated and cloned. β4GalT1 is a member of a homologous family of seven β1,4-galactosyltransferases, β4Gal-T1 – T7, that catalyze the transfer of galactose from UDP-Gal to acceptor sugars including GlcNAc (the acceptor substrate for β4GalT1), Glc and Xyl. β4GalT1 exists as a membrane bound form and as a shed/secreted form deriving from proteolytic cleavage in the stalk region. β4GalT1 may form a heterodimer with α-Lactalbumin, and the complex catalyzes the reaction of UDP-Gal + glucose -> lactose + UDP.

BIOLOGICAL ACTIVITY: Specific activity >2,500 pmol/min/mg. Measured by transfer of galactose from UDP-galactose (UDP-Gal) to 4-Methylumbelliferyl N-acetyl-β-D-glucosaminide, enzyme reactions containing: 25 mM MES pH 7.4, 0.25% NP-40, 10 mM MnCl2, 4 mM UDP-Gal and 0.8mM GlcNAc-Mu. Incubated at 37ºC for 30 min.



RELATED PRODUCT:

- GalNAc-T2, soluble fragment, Human Recombinant **(Cat. No. P1215)**
- GalNAc-T3, soluble fragment, Human Recombinant **(Cat. No. P1216)**
- GalNAc-T5, soluble fragment, Human Recombinant **(Cat. No. P1217)**
- GalNAc-T16, soluble fragment, Human Recombinant **(Cat. No. P1218)**
- B3GNT6, soluble fragment, Human Recombinant **(Cat. No. P1219)**
- 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.