

Product datasheet for KN200258BN

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OriGene Technologies, Inc.

B4GALT7 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo Symbol: B4GALT7 11285 Locus ID:

KN200258G1, B4GALT7 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN200258G2, B4GALT7 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN200258BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is

> designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the

experimental process.

NM 007255 RefSeq: UniProt ID: Q9UBV7

Synonyms: EDSP1; XGALT1; XGPT1

Summary: This gene is a member of the beta-1,4-galactosyltransferase (beta4GalT) family. Family

> members encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose. Each beta4GalT member has a distinct function in the biosynthesis of different glycoconjugates and saccharide structures. As type II membrane proteins, they have an N-terminal hydrophobic signal sequence that directs the

protein to the Golgi apparatus which then remains uncleaved to function as a

transmembrane anchor. The enzyme encoded by this gene attaches the first galactose in the common carbohydrate-protein linkage (GlcA-beta1,3-Gal-beta1,3-Gal-beta1,4-Xyl-beta1-O-Ser) found in proteoglycans. This enzyme differs from other beta4GalTs because it lacks the conserved Cys residues found in beta4GalT1-beta4GalT6 and it is located in cis-Golgi instead of trans-Golgi. Mutations in this gene have been associated with the progeroid form of Ehlers-

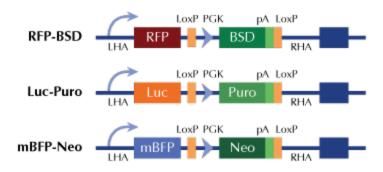
Danlos syndrome. [provided by RefSeq, Oct 2009]





Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter