

β-1,4-Gal-T7 (K-13): sc-160111

BACKGROUND

β-1,4-galactosyltransferases (β-1,4-Gal-T) are type II membrane-bound glycoproteins that are substrate-specific and function to transfer galactose in a β-1,4 linkage to an acceptor sugar. There are seven members of the β-1,4-Gal-T family, all of which are directed to the Golgi apparatus through a hydrophobic sequence at the N-terminus. β-1,4-Gal-T7, also known as B4GALT7 or XGALT1, is a 327 amino acid single-pass type II membrane protein that is expressed at high levels in heart, pancreas and liver. β-1,4-Gal-T7 uses manganese to catalyze the UDP-dependent biosynthesis of glycosphingolipids. The gene encoding β-1,4-Gal-T7 is mutated in Ehlers-Danlos syndrome progeroid type (EDSP), a variant form of Ehlers-Danlos syndrome characterized by progeroid facies, mild mental retardation, short stature, skin hyperextensibility, moderate skin fragility, joint hypermobility principally in digits.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: B4GALT7 (human) mapping to 5q35.3; B4galt7 (mouse) mapping to 13 B1.

SOURCE

β-1,4-Gal-T7 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of β-1,4-Gal-T7 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160111 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β-1,4-Gal-T7 (K-13) is recommended for detection of β-1,4-Gal-T7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other β-1,4-Gal-T family members.

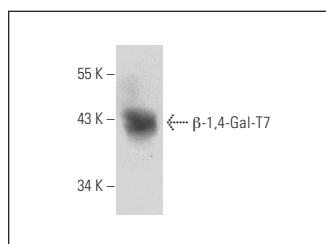
β-1,4-Gal-T7 (K-13) is also recommended for detection of β-1,4-Gal-T7 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for β-1,4-Gal-T7 siRNA (h): sc-91927, β-1,4-Gal-T7 siRNA (m): sc-108227, β-1,4-Gal-T7 shRNA Plasmid (h): sc-91927-SH, β-1,4-Gal-T7 shRNA Plasmid (m): sc-108227-SH, β-1,4-Gal-T7 shRNA (h) Lentiviral Particles: sc-91927-V and β-1,4-Gal-T7 shRNA (m) Lentiviral Particles: sc-108227-V.

Molecular Weight of β-1,4-Gal-T7: 37 kDa.

Positive Controls: mouse skeletal extract: sc-364250.

DATA



β-1,4-Gal-T7 (K-13): sc-160111. Western blot analysis of β-1,4-Gal-T7 expression in mouse skeletal tissue extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.