

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ST6 Gal Sialyltransferase 2/ST6GAL2 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human ST6GAL1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human ST6 Gal Sialyltransferase 2/ST6GAL2 Glu243-Ser529 Accession # Q96JF0
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

ST6GAL2 (Sialyltransferase 2; also β -galactoside α -2,6 Sialyltransferase 2) is a 60-62 kDa member of the glycosyltransferase 29 family of enzymes. It has restricted expression, likely being found in neurons and bronchial epithelium. ST6GAL2 transfers sialic acid from CMP-Neu5Ac to a galactose that is linked to N-Acetylglucosamine through a β 1-4 linkage (Gal β 1-4GlcNAc). This transfer will occur when the target motif is found either on select glycoproteins or free oligosaccharides. Notably, the kinetics of this enzyme suggest additional biological functions other than sialic acid transfer. Human ST6GAL2 is a 529 amino acid (aa) type II transmembrane Golgi protein. It contains an 11 aa N-terminal cytoplasmic region and a 497 aa luminal domain (aa 33-529). The luminal domain possesses an L motif that binds CMP-Sialic acid (aa 296-343), an S motif that binds CMP-Sialic acid and galactose (aa 444-458) and a VS motif that is involved with the enzyme's catalytic activity (aa 483-488). There is some evidence that ST6GAL2 may form homodimers. There is one splice variant that shows a 26 aa substitution for aa 441-529. Over aa 243-529, human ST6GAL2 shares 88% aa sequence identity with mouse ST6GAL2.

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