ST3GAL3 Protein, Human (His-SUMO)

Cat. No.:	HY-P71529
Synonyms:	3 sialyltransferase; 3(4) GlcNAc alpha-2; 3-sialyltransferase 3; 3-sialyltransferase; 3-ST 3; 4-galactoside alpha-2; 4GlcNAc alpha 2 3 sialyltransferase; Alpha 2 3 sialyltransferase II; Alpha 2 3 sialyltransferase III; Alpha 2 3 ST 3; Alpha 2; Beta galactoside alpha 3 sialyltransferase 3; Beta-galactoside alpha-2; CMP N acetylneuraminate beta 1 4 galactoside alpha 2 3 sialyltransferase; CMP-N-acetylneuraminate-beta-1; EC 2.4.99.6; Gal beta 1 3; Gal beta 1 3(4) GlcNAc alpha 2 3 sialyltransferase; Gal beta 1 3(4)GlcNAc alpha 2 3 sialyltransferase; Gal beta-1; N acetyllactosaminide alpha 2 3 sialyltransferase; N-acetyllactosaminide alpha-2; OTTHUMP00000008820; OTTHUMP00000008821; OTTHUMP00000008822; OTTHUMP00000008823; Sialyltransferase 6 (N acetyllacosaminide alpha 2 3 sialyltransferase); Sialyltransferase 6; SIAT6; SIAT6_HUMAN; ST3 beta galactoside alpha 2 3 sialyltransferase 3; ST3 beta galactoside alpha 2,3 sialyltransferase 3; ST3Gal III; St3gal3; ST3GALII; ST3GalIII; ST3N
Species:	Human
Source:	E. coli
Accession:	Q11203 (29K-375I)
Gene ID:	6487
Molecular Weight:	Approximately 54.9 kDa

PROPERTIES

AA Sequence	K L H L L Q W E E D S N S V V L S F D S A G Q T L G S E Y D R L G F L L N L D S K L P A E L A T K Y A N F S E G A C K P G Y A S A L M T A I F P R F S K P A P M F L D D S F R K W A R I R E F V P P F G I K G Q D N L I K A I L S V T K E Y R L T P A L D S L R C R R C I I V G N G G V L A N K S L G S R I D D Y D I V V R L N S A P V K G F E K D V G S K T T L R I T Y P E G A M Q R P E Q Y E R D S L F V L A G F K W Q D F K W L K Y I V Y K E R V S A S D G F W K S V A T R V P K E P P E I R I L N P Y F I Q E A A F T L I G L P F N N G L M G R G N I P T L G S V A V T M A L H G C D E V A V A G F G Y D M S T P N A P L H Y Y E T V R M A A I K E S W T H N I Q R E K E F L R K L V K A R V I T D L S S G I
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder
Formulation	Lyophilized after extensive dialysis against solution in 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	ST3GAL3, or sialyltransferase 3, is an enzyme that catalyzes the formation of terminal carbohydrate sequences on glycoproteins and glycolipids. Specifically, it is responsible for adding sialic acid to the Gal-beta-1,3-GlcNAc, Gal-beta-1,3-GlcNAc, and Gal-beta-1,3-GalNAc structures, resulting in the formation of NeuAc-alpha-2,3-Gal-beta-1,4-GlcNAc, NeuAc-alpha-2,3-Gal-beta-1,3-GlcNAc, and NeuAc-alpha-2,3-Gal-beta-1,3-GalNAc sequences. These sialylation events play a crucial role in modulating the structure and function of glycoproteins and glycolipids, impacting various cellular processes. ST3GAL3 exhibits varying degrees of activity towards different substrates, with the highest activity observed towards Gal-beta-1,3-GlcNAc and the lowest towards Gal-beta-1,3-GalNAc. It has to succinctly outline ST3GAL3's role in catalyzing the addition of sialic acid to specific carbohydrate structures, highlighting its contribution to the diversity of terminal glycan sequences in biological molecules.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA