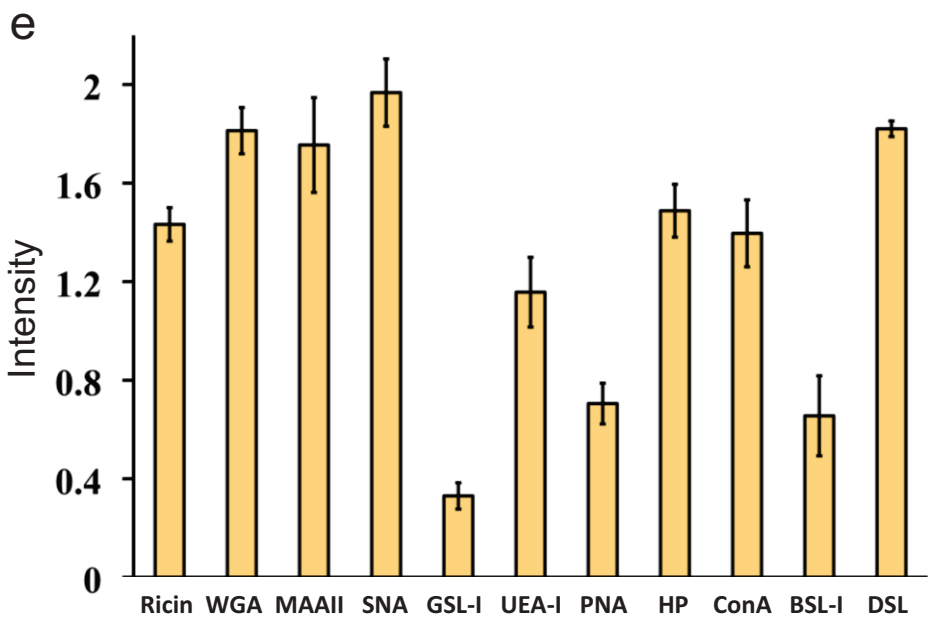
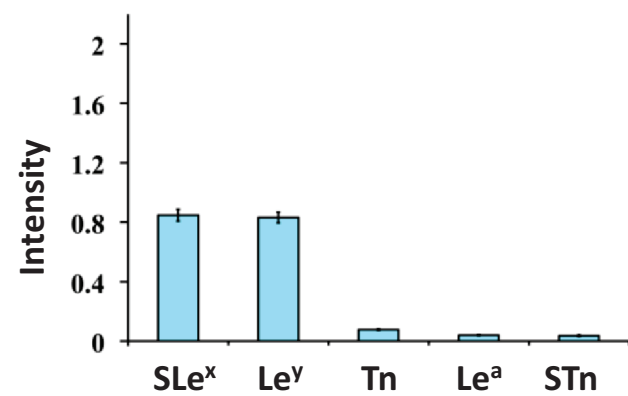


Supplementary Figure 1

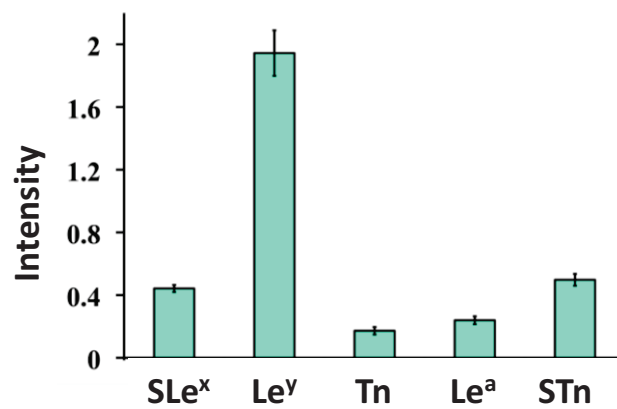


- 1: Ricin → Galβ
- 2: WGA → GlcNAc and Neu5Ac
- 3: MAA-II → Neu5Ac-α2-3
- 4: SNA → Neu5Ac-α2-6
- 5: GSL-I → α-GalNAc and α-Gal
- 6: UEA-I → α-Fucose
- 7: PNA → Galβ1-3GalNAc
- 8: HP → GalNAc
- 9: ConA → Mannose core
- 10: BSL-I → α-GalNAc and α-Gal
- 11: DSL → GlcNAc

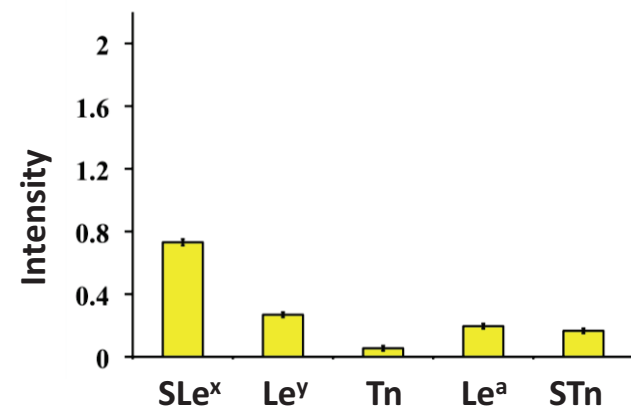
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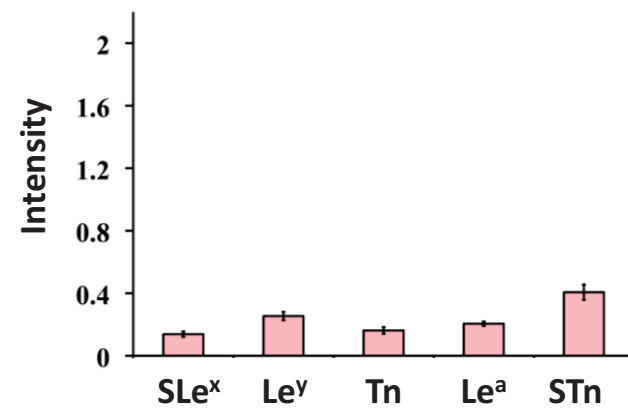
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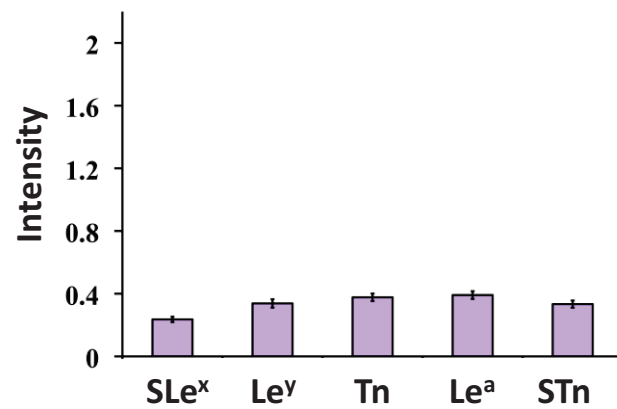
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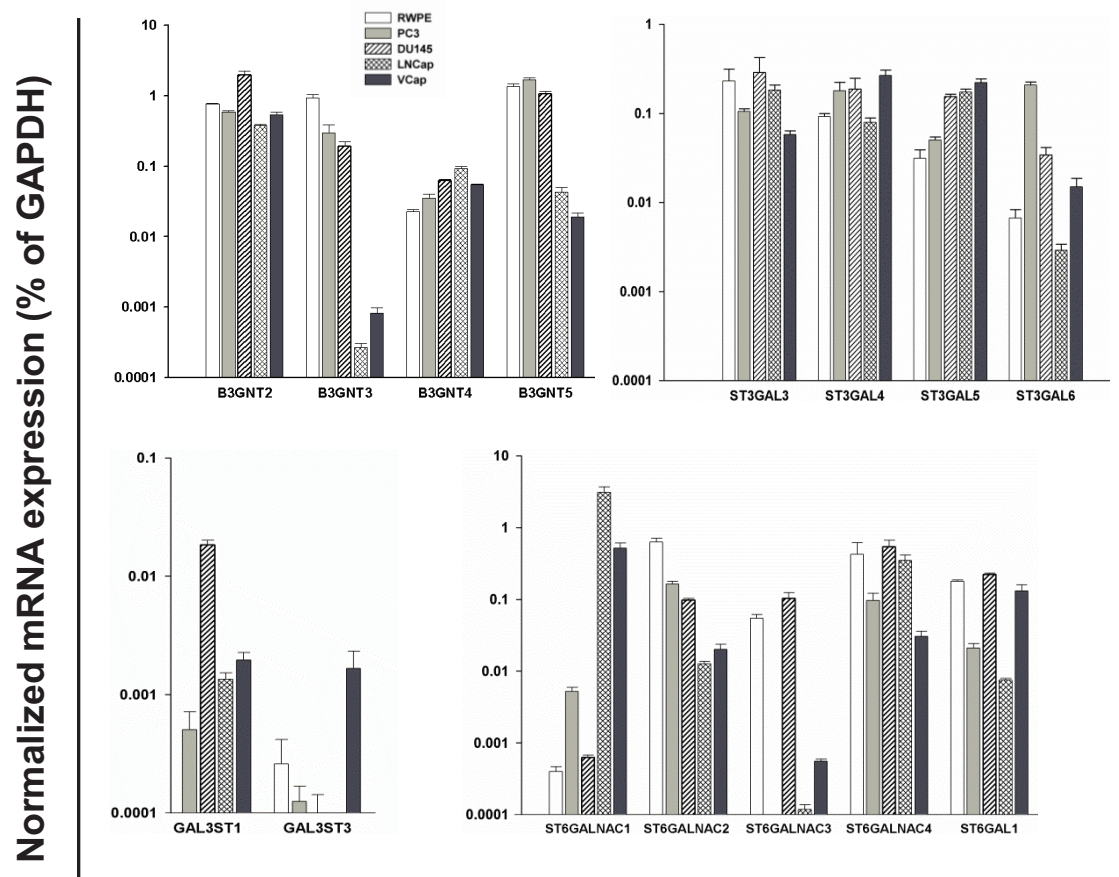
d



e



Supplementary Figure 3



Supplementary Table 1 Oligonucleotide primers used for quantitative real-time PCR analysis

Glycosyltransferases*	Forward primer (5'-3')	Reverse primer (5'-3')
<i>MGAT1 (GnT-I)</i>	ATTGTCACCTTCCAGTTCCG	GTCCACCTCAGCTCATG
<i>MGAT2 (GnT-II)</i>	CAGTTCCGACCGTGACAG	AGGATTAGCACCTTCCGTTTG
<i>MGAT5 (GnT-V)</i>	TGTGAGGGAAAGATCAAGTGG	GCTCTCCAAGGTAAATGAGGAC
<i>C1GALT1</i>	AGAAGCAAAGGTCACCAGTCCCAA	AGCCAGGATTTAGAGGCCATTTCC
<i>GCNT1 (C2GnT1)</i>	GCATGGTTTCTGCAGAGCACAGTT	TTCCACAATGCCTTGCTACCTGC
<i>GCNT3 (C2GnT2)</i>	AGAAGCGAGAGCCTTTCACAGACA	TACACAGCTCGCAGTAGCCTTCA
<i>GCNT4 (C2GnT3)</i>	GTTCCCTGGGCTTTCCTTGTTTGA	ACTCACCTAAGGCCAAAGGGAACA
<i>B3GNT1 (β3GlcNAcT1, iGnT)</i>	TCCTATATCGCCAGTTCAAACAG	AGCGACATTTCTTACCCAG
<i>B3GNT6 (C3GnT, Core-3 synthase)</i>	CAACGTAGTCCGCTTCCTG	AAGTACTTGCTCCAGTGTC
<i>B4GALNT3</i>	TGGATGTTGAGATGGCAGTCG	TGGAGGTCACAGAGGAAGAT
<i>B4GALT1</i>	CTAGCAACTTGACCTCGGT	CATTTGGGTTCTGCTTTGCC
<i>B4GALT2</i>	GCATAACGAACTAACCCTCAG	GCCCAATGTCCACTGTGATA
<i>B4GALT3</i>	GTAACCTCAGTCACCTGCC	ATTCCGCTCCACAATCTCTG
<i>B4GALT4</i>	ACTTCGTGGGTGCCATTCAAGAGA	AAGGAGACACAGAAGGGCAGTTGT
<i>B4GALT5</i>	TGGAACAGAGTACAGAATGCAG	CCTTGCCGTTCTTTTGACTTC
<i>B4GALT6</i>	CTTCACATACTACCATACTCC	CCCCTGGCTCAATATCTAAATCC
<i>B3GALT5</i>	ATTGGCATATCTGGTTCTGAGG	AGGTTCTGGGCTTGGTTTG
<i>ST3GAL1</i>	ATCCCGGTTTCTGCAAAGATCAGA	ACAAGTCCACCTCATCGCAGACAT
<i>ST3GAL2</i>	TTTGATGTGGTGCCAGAATAGGC	AGGTGAAGAGCAGGGACATGATGA
<i>FUT1</i>	CCACTCTGGACATTGGCTA	GCTGGCTCTAGAAAGATCAG
<i>FUT2</i>	GAGTGAAGAGAGACCCAGAGGGAAC	CTTTGATGTTGAGGCTAGCAGCTGGT
<i>FUT3</i>	AGAGAGATCATCACGGCACGGTTT	ATAAGTGGTGGTCTGGGCTTGAA
<i>FUT4</i>	TGCAGGTGGGACTTTGTTGTTTGG	TCCTCCAAGGACAATCCAGCACTT
<i>GAL3ST2</i>	GATTCTGCACTCGGACTTAG	GAAGCGGTAGAGGATGTTGAG
<i>GAL3ST4</i>	CTACCCAAAGCTCTTCCAGG	AGAAGCTGTCAGAAGGCATG
<i>CHST1 (GlcNAc6ST1)</i>	CGAAATGGAGCAGTTGCCCTGAA	ACTCCTCCACCTGTTTGATCTGCT
<i>CHST2 (GlcNAc6ST2)</i>	ATCCCATGAATTTGCTGGGCTACC	AGATGTAGGCAAGGCTCAGAAGCA
<i>CHST3 (GlcNAc6ST3)</i>	GCAGACACGCCAAGCTTTGAGAAA	AGCTGCAACGCTGATCACAAATCC
<i>CHST4 (GlcNAc6ST4)</i>	TAGTGCAACTTCTGTGAGCCAGT	TCCATCAAGCCTCACCTCACAACA
<i>GAPDH</i>	GAGAGGAGCAGGTAGAGGG	AGAATGAGGGTGGCATTGG
<i>B3GNT2</i>	CTGCTCCTATGTAGATCTGATGTTAG	TGGGAAC TATCAA AATACACCTTTC
<i>B3GNT3 (elongation β3GlcNAcT)</i>	ATAAGGGAGTGCCAGGGAAGGTTT	ACAGTTGGA ACTTAGCACAGGCA
<i>B3GNT4</i>	CCCAACGTGTTAGAGTTCTCTG	TGAGGGTGGGATGAAGTATTT
<i>B3GNT5</i>	TGACTTCAGCAAGAGTGACTG	TTGTTTTGCGTGTTTCCGAC
<i>ST3GAL3</i>	TGTTCTGGATGACTCCTTTTCGCA	CTTGTTGGCAAGAACGCCTCCATT
<i>ST3GAL4</i>	ATGAGCAGATCACGCTCAAGTCCA	TCCCATCTCCAGCATCCGCTTAAT
<i>ST3GAL5</i>	GCACGGATTAGA ACTGGG	CGCCCTCTGGATAAGTCAT
<i>ST3GAL6</i>	TCTATTGGGTGGCACCTGTGGAAA	TGATGAAACCTCAGCAGAGAGGCA
<i>GAL3ST1</i>	CCTCAGCCTTCCAAGTAACTAG	AGGAAACTAGTGAAGAGCGC
<i>GAL3ST3</i>	CACCGTAAGCCTTCTCATCC	CTGCCGTCTTGAGTCTTC
<i>B3GALT1</i>	GACCATGCTTGATTTCTGAAC	CCTCTGCCTCATTCTACTTTC
<i>B3GALT2</i>	AGTGGGCATAATCCTCTTAC	GCAATCATTTTCTAATTCAGTCACATT
<i>ST6GALNAC1</i>	TTCAAATCTGAGCCTCGGTG	AGTGAGGTTGGGCAGAAAG
<i>ST6GALNAC2</i>	AACTCCCTCGTCTCCTACTG	CCGATCTCAGCATCACATAGTC
<i>ST6GALNAC3</i>	CATTCTCTACACATACAGGCG	CTATCTCATTTCCACCTTCTGG
<i>ST6GALNAC4</i>	TTCACCATGATCCTCGCG	CATCTGACACTCATCTAGCCG
<i>ST6GAL1</i>	TGGTGAATGTCATGGAGCC	AGGGAAGGTTTATTGGGTCTG

* Gene name in parenthesis are used to denote enzyme species throughout this manuscript.