## Supplementary Materials: Upregulation of Human ST8Sia VI ( $\alpha$ 2,8-Sialyltransferase) Gene Expression by Physcion in SK-N-BE(2)-C Human Neuroblastoma Cells

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**Figure S1.** Effects of physcion on gene expression of human sialyltransferases in SK-N-BE(2)-C cells. SK-N-BE(2)-C cells were treated with retinoic acid (10  $\mu$ M), physcion (40  $\mu$ M), and emodin (40  $\mu$ M) for 24 h. mRNA transcripts of human sialyltransferase were detected by RT-PCR. As the internal controls, parallel reactions were performed to measure levels of GAPDH and  $\beta$ -actin.

Primer	Sequence	Strand	Size (bp)
hST3Gal I	5'-CTGAAAGTGCTCACCTTCCTCGTGC-3'	Sense	
hST3Gal I	5'-ACAGCTCCTTGATGGTGTCATTCAA-3'	Antisense	337
hST3Gal II	5'-TACCTGGACTCAGGGGCCCTGGATG-3'	Sense	
hST3Gal II	5'-GGCACTGGTGGGGGTCCCGGAA-3'	Antisense	343
hST3Gal III	5'-GTATGATCGGTTGGGCTTC-3'	Sense	
hST3Gal III	5'-CGCTCGTACTGCTCAGG-3'	Antisense	520
hST3Gal IV	5'-GCTTTCACCTCTGTGCAG-3'	Sense	
hST3Gal IV	5'-CTTGTTGATGGCATCTCCC-3'	Antisense	240
hST3Gal V	5'-CCCTGCCATTCTGGGTACGAC-3'	Sense	
hST3Gal V	5'-CACGATCAATGCCTCCACTGAGATC-3'	Antisense	413
hST3Gal VI	5'-TTGGGAGAAGGACAACCTTC-3'	Sense	
hST3Gal VI	5'-CCAGGCAGCAACAGACAGTA-3'	Antisense	630
hST6Gal I	5'-TATCGTAAGCTGCACCCCAATC-3'	Sense	
hST6Gal I	5'-TTAGCAGTGAATGGTCCGGAAG-3'	Antisense	372
hST6GalNAc I	5'-GCAACCACAGCCAAGACGCTCATTCCC-3'	Sense	
hST6GalNAc I	5'-TGTCACGACCTTCTGCACCAAGGAGTAG-3'	Antisense	456
hST6GalNAc II	5'-AAGCTGCTACATCCGGACTTCA-3'	Sense	
hST6GalNAc II	5'-GGGACAGATCGTGGTTTGCATA-3'	Antisense	247
hST6GalNAc III	5'-CTGTGATTGCTGTGAGCTTCATAG-3'	Sense	
hST6GalNAc III	5'-AAGAGGAACGCTGGTATGGGACACA-3'	Antisense	380
hST6GalNAc IV	5'-CGGCTCGTGCTCATCATCCTGTGCT-3'	Sense	
hST6GalNAc IV	5'-GTGAGCTGCAGCAGCGTGCGGTAGG-3'	Antisense	503
hST6GalNAc V	5'-ATGAAGACCCTGATGCGCCATGGTC-3'	Sense	
hST6GalNAc V	5'-CTTGTGGCGAGTAATCATGAAGGCC-3'	Antisense	624
hST6GalNAc VI	5'-ATGAGTAGCAACAAAGAGCAGCGGT-3'	Sense	
hST6GalNAc VI	5'-AACACCAGGCCCGCTCGCTGGATCA-3'	Antisense	518
hST8Sia I	5'-TGTGGTCCAGAAAGACATTTGTGGACA-3'	Sense	
hST8Sia I	5'-TGGAGTGAGGTATCTTCACATGGGTCC-3'	Antisense	460
hST8Sia II	5'-ACCATGAATGTGTCCCAGAACCTCTA-3'	Sense	
hST8Sia II	5'-AGGTAGATTTGTTTGCAGAAACGTGTG-3'	Antisense	542
hST8Sia III	5'-GCTTGACGGGGCCATTCTTTGG-3'	Sense	
hST8Sia III	5'-GCTTGGTGAGCCCTTCCCCA-3'	Antisense	410
hST8Sia IV	5'-GCCACAGAAGACCCCAGTGA-3'	Sense	
hST8Sia IV	5'-CACTGACACATCTCGTTCTGCA-3'	Antisense	450
hST8Sia V	5'-ACCGGGATTTGTTGGGGAGCCGA-3'	Sense	
hST8Sia V	5'-GATGCCACTGGTGTCCACCTCA-3'	Antisense	392
hST8Sia VI	5'-CCCTATTTCTGGAGGACATTGCAACCTA-3'	Sense	
hST8Sia VI	5'-GTTGGAGGATCTGGCTGTATTCTTTG-3'	Antisense	390
β-actin	5'-CAAGAGATGGCCACGGCTGCT-3'	Sense	
β-actin	5'-TCCTTCTGCATCCTGTCGGCA-3'	Antisense	247
GAPDH	5'-AGCCTCAAGATCATCAGCAATGTCCT-3'	Sense	
GAPDH	5'-AAATTCGTTGTCATACCAGGAAATGAG-3'	Antisense	528

**Table S1.** Primer sequences used for reverse transcription-polymerase chain reaction (RT-PCR) of nineteen human sialyltransferase genes.



