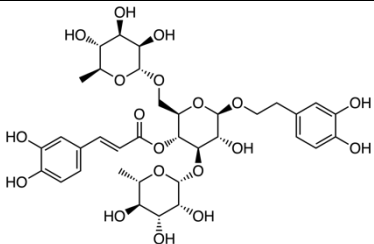
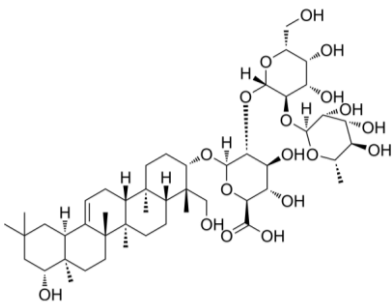
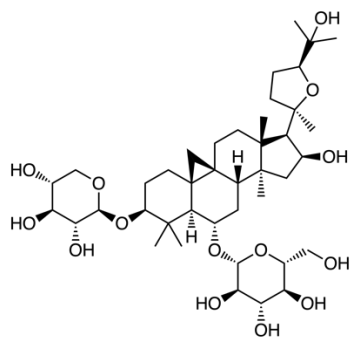
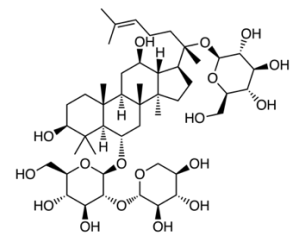
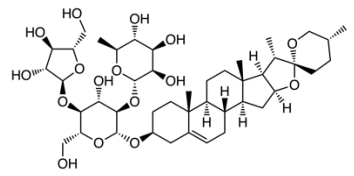
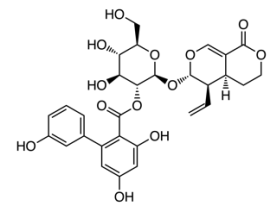
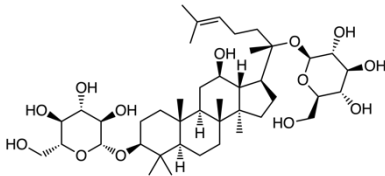
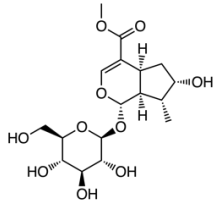
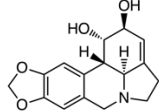
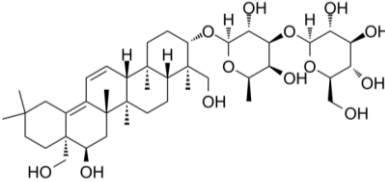
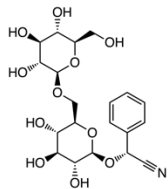


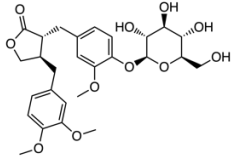
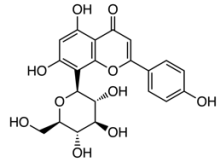
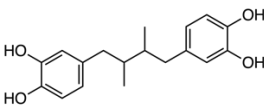
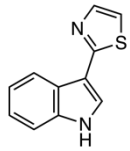
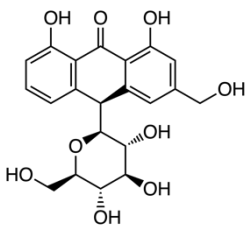
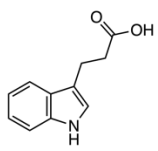
Figure S1. The enzyme effects of NGLY1 and PNGase F using the electrophoretic mobility shift assay.

Table S1. Information of 17 primary screening compounds.

Compound	CAS	Molecular Formula	Weight (g/mol)	2D Structure	Source	Docking Score	Bioactivity
Poliumoside	94079-81-9	C ₃₅ H ₄₆ O ₁₉	770.7		Brandisia hancei	-10.088	Related to glycosylation[1]
Soyasaponin Bb	51330-27-9	C ₄₈ H ₇₈ O ₁₈	943.1		Glycine max	-8.497	Related to glycosylation[2]

Astragaloside IV	84687-43-4	C ₄₁ H ₆₈ O ₁₄	785		Astragalus membranaceus	-7.722	Anti-tumor[3]
Notoginsenoside R1	80418-24-2	C ₄₇ H ₈₀ O ₁₈	933.1		Panax notoginseng	-6.549	Anti-inflammatory and antioxidant[4]
Polyphyllin I	50773-41-6	C ₄₄ H ₇₀ O ₁₆	855		Paris	-6.52	Anti-tumor[5]
Amarogentin	21018-84-8	C ₂₉ H ₃₀ O ₁₃	586.5		Gentiana scabra Bunge	-6.382	Anti-tumor and antioxidant[6]

Ginsenoside F2	62025-49-4	C ₄₂ H ₇₂ O ₁₃	785		Panax ginseng	-6.367	Anti-tumor[7]
Loganin	18524-94-2	C ₁₇ H ₂₆ O ₁₀	390.4		Strychnos nux-vomica	-6.301	Anti-inflammatory[8]
Lycorine	476-28-8	C ₁₆ H ₁₇ NO ₄	287.31		Lycoris radiata	-6.185	Anti-tumor[9]
Saikosaponin B2	58316-41-9	C ₄₂ H ₆₈ O ₁₃	781		Bupleurum kaoi	-6.007	Anti-tumor[10]
Amygdalin	29883-15-6	C ₂₀ H ₂₇ NO ₁₁	457.4		apricot kernel	-6.006	Anti-tumor[11]

Arctiin	20362-31-6	C ₂₇ H ₃₄ O ₁₁	534.6		Arctium lappa	-5.938	Anti-tumor[12]
Vitexin	38953-85-4	C ₂₁ H ₂₀ O ₁₀	432.4		Vitex trifolia	-5.737	Anti-tumor, anti-inflammatory and antioxidant[13]
Nordihydroguaiaretic acid	500-38-9	C ₁₈ H ₂₂ O ₄	302.4		Guaiacum	-5.216	Antioxidant[14]
Camalexin	135531-86-1	C ₁₁ H ₈ N ₂ S	200.26		Arabidopsis	-5.024	Anti-tumor[15]
Aloin	1415-73-2	C ₂₁ H ₂₂ O ₉	418.4		Aloe	-4.956	Anti-tumor[16]
3-Indolepropionic acid	830-96-6	C ₁₁ H ₁₁ NO ₂	189.21		Animal	-4.826	Antioxidant[17]

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