

Supplementary Information, Table S3. Characterized terpene glycosyltransferases collected in CAZy and UniprotKB databases

Characterized terpene glycosyltransferases	Numbers	reference
Abscisic acid glycosyltransferase (sesquiterpenes)	1	[1]
limonoid UDP-glycosyltransferase (tetranortriterpenoids)	1	[2]
Steviol glycosyltransferase (diterpenes)	1	[3]
Stevioside β -glucosyltransferase (diterpenes)	1	[3]
Steviolbioside glycosyltransferase (diterpenes)	1	[3]
Saponin glycosyltransferase (nootigenin)	1	[4]
Triterpene UDP-glucosyl transferase (pentacyclic triterpenoids)	4 ^a	[5-7]
Soyasaponin III rhamnosyltransferase (soyasaponin)	1	[8]
Soyasapogenol B glucuronide galactosyltransferase (soyasaponin)	1	[8]
Crocetin glycosyltransferase (tetraterpenes)	2	[9]

^a, Eight glycosyltransferases which showed activity on different pentacyclic triterpenoids compounds *in vitro* had been identified. However, four of them identified in *Barbarea vulgaris* had not been collected in CAZy and UniprotKB databases [10].

Reference

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- 4 Kohara A, Nakajima C, Hashimoto K *et al.* A novel glucosyltransferase involved in steroid saponin biosynthesis in *Solanum aculeatissimum*. *Plant Mol Biol* 2005; **57**:225-239.
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- 6 Naoumkina MA, Modolo LV, Huhman DV *et al.* Genomic and coexpression analyses predict multiple genes involved in triterpene saponin biosynthesis in *Medicago truncatula*. *Plant Cell* 2010; **22**:850-866.
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- 10 Augustin JM, Drok S, Shinoda T *et al.* UDP-glycosyltransferases from the UGT73C subfamily in *Barbarea vulgaris* catalyze saponin 3-O-glucosylation in saponin-mediated insect resistance. *Plant Physiol* 2012; **160**:1881-1895.