

Additional Table S5 Statistics of the isoform numbers of the genes related to ginsenoside biosynthesis among different *Panax* species and *W. somnifera* based on RNA-seq data

pathway	gene	<i>P. ginseng</i>	<i>P. quinquefolium</i>	<i>P. japonicus</i>	<i>W. somnifera</i>
MVA	AACT	102	20	18	15
	HMGS	46	17	10	26
	HMGR	47	20	19	23
	MVK	4	8	4	4
	PMK	31	12	20	11
	MVD	8	6	8	8
MEP	DXS	99	51	34	47
	DXR	16	7	8	13
	IspD	10	4	6	6
	IspE	18	21	13	17
	IspF	26	17	8	16
	IspG	29	16	13	8
	IspH	48	19	4	12
Skeleton	IPI	12	2	2	27
	GGR	36	47	49	48
	FPS	12	8	10	44
	SS	8	14	18	18
Saponin	SE	38	37	14	34
	beta-AS	14	116	54	46
	DS	4	58	28	22
	GT	200	204	195	356
	CYP450	243	430	410	689

Note: *W. somnifera*, *Withania Somnifera*. SRA accession numbers of the public RNA-seq datasets used in above table: SRR2164754 (one year-old leaf), SRR1586196 (seed), SRR1182934 (leaf) of *P. quinquefolium*. SRR3203822 (flower), SRR3203826 (lateral root), SRR3203825 (young rhizome), SRR3203824 (old rhizome), SRR3203823 (leaf) of 7 year-old *Panax japonicus* C. A. Mey. SRR1197746 (leaf) and SRR1197573 (root) of *W. somnifera*. The annotation threshold was TPM ≥ 1 .