

Table S2. Single nucleotide polymorphisms (SNPs) present in *GSL1 HYD* genes.

Gene ^a	SNP	Feature	Type	Allele 1 ^b		Allele 2 ^b			
				nt	Frequency ^c	AA ^d	nt	Frequency ^c	AA ^d
<i>HYDA</i>	M212	5'UTR	non-coding	C	22.9	-	A	75.4	-
<i>HYDA</i>	R222	CDS	non-synonymous	G	31.1	A2	A	68.8	T2
<i>HYDA</i>	Y291	CDS	non-synonymous	C	43.9	P25	T	54.6	S25
<i>HYDA</i>	Y331	CDS	non-synonymous	C	46.3	S38	T	52.7	L38
<i>HYDA</i>	Y343	CDS	non-synonymous	C	43.9	A42	T	53.4	V42
<i>HYDA</i>	W344	CDS	non-synonymous	T	43.3	A42	A	54.5	V42
<i>HYDA</i>	W389	CDS	synonymous	T	39.5	nc	A	55.7	nc
<i>HYDA</i>	W413	CDS	synonymous	A	42.4	nc	T	53.2	nc
<i>HYDA</i>	Y416	CDS	synonymous	T	43.3	nc	C	53.9	nc
<i>HYDA</i>	Y437	CDS	synonymous	T	44.0	nc	C	53.1	nc
<i>HYDA</i>	Y443	CDS	synonymous	C	49.1	nc	T	49.4	nc
<i>HYDA</i>	W464	CDS	synonymous	T	52.6	nc	A	44.6	nc
<i>HYDA</i>	M466	CDS	non-synonymous	C	55.0	A83	A	44.0	E83
<i>HYDA</i>	R467	CDS	non-synonymous	A	55.3	A83	G	43.9	E83
<i>HYDA</i>	Y680	CDS	synonymous	C	57.4	nc	T	41.7	nc
<i>HYDA</i>	Y683	CDS	synonymous	T	57.4	nc	C	42.2	nc
<i>HYDA</i>	S693	CDS	non-synonymous	C	57.5	P159	G	41.8	A159
<i>HYDA</i>	W713	CDS	synonymous	T	58.3	nc	A	40.1	nc
<i>HYDA</i>	R737	CDS	synonymous	G	58.2	nc	A	41.0	nc
<i>HYDA</i>	Y840	CDS	synonymous	C	50.2	nc	T	48.2	nc
<i>HYDA</i>	Y852	CDS	synonymous	T	48.8	nc	C	48.1	nc
<i>HYDA</i>	Y873	CDS	synonymous	C	52.8	nc	T	46.2	nc
<i>HYDA</i>	K882	CDS	synonymous	T	51.6	nc	G	48.1	nc
<i>HYDA</i>	Y909	CDS	synonymous	C	51.5	nc	T	47.0	nc
<i>HYDA</i>	R918	CDS	synonymous	A	49.1	nc	G	50.4	nc
<i>HYDA</i>	N1161	CDS	synonymous	A	53.1	nc	G	45.3	nc
<i>HYDA</i>	Y1183	CDS	synonymous	T	49.3	nc	C	47.3	nc
<i>HYDA</i>	W1321	CDS	synonymous	T	48.5	nc	A	49.2	nc
<i>HYDA</i>	M1345	CDS	synonymous	A	47.7	nc	C	47.6	nc
<i>HYDA</i>	Y1393	CDS	synonymous	T	49.6	nc	C	47.7	nc
<i>HYDA</i>	R1432	CDS	synonymous	G	56.9	nc	A	42.7	nc
<i>HYDA</i>	Y1465	CDS	synonymous	C	58.4	nc	T	40.5	nc
<i>HYDA</i>	Y1480	CDS	synonymous	T	58.1	nc	C	40.6	nc
<i>HYDA</i>	W1483	CDS	synonymous	T	59.1	nc	A	39.7	nc
<i>HYDA</i>	S1495	CDS	synonymous	C	59.2	nc	G	39.4	nc
<i>HYDA</i>	N1613	3' UTR	non-coding indel	-	NA	-	A	NA	-
<i>HYDA</i>	Y1679	3' UTR	non-coding	T	51.3	-	C	47.4	-
<i>HYDA</i>	K1703	3' UTR	non-coding	G	50.0	-	T	49.6	-
<i>HYDA</i>	Y1716	3' UTR	non-coding	T	51.2	-	C	48.0	-
<i>HYDE/EF</i>	R1419	CDS	synonymous	A	90.0	H370	G	8.5	R370

<i>HYDE/EF</i>	R1576	CDS	synonymous	G	86.7	nc	A	10.2	nc
<i>HYDE/EF</i>	Y1591	CDS	synonymous	T	90.5	nc	C	8.7	nc
<i>HYDE/EF</i>	K1685	CDS	synonymous	G	93.5	A459	T	5.9	S459
<i>HYDE/EF</i>	Y	INTRON	non-coding	C	80.6	-	T	13.1	-
<i>HYDE/EF</i>	R	INTRON	non-coding	A	85.7	-	G	14.3	-
<i>HYDE/EF</i>	Y	INTRON	non-coding	C	93.8	-	T	6.3	-
<i>HYDE/EF</i>	Y	INTRON	non-coding	T	88.3	-	C	10.6	-
<i>HYDE/EF</i>	Y	INTRON	non-coding	T	87.4	-	C	11.9	-
<i>HYDE/EF</i>	R	INTRON	non-coding	G	87.1	-	A	12.1	-
<i>HYDE/EF</i>	Y	INTRON	non-coding	C	85.1	-	T	14.5	-
<i>HYDE/EF</i>	Y	INTRON	non-coding	C	87.5	-	T	12.6	-
<i>HYDE/EF</i>	S	INTRON	non-coding	C	NA	-	G	NA	-
<i>HYDE/EF</i>	S	INTRON	non-coding	G	NA	-	C	NA	-
<i>HYDE/EF</i>	K	INTRON	non-coding	G	NA	-	T	NA	-
<i>HYDE/EF</i>	Y	INTRON	non-coding	C	NA	-	T	NA	-
<i>HYDG</i>	Y204	CDS	non-synonymous	C	49.7	R61	T	48.6	W61

^a *HYDE/EF* indicates the comparison of the *HYDE* region of the *HYDE* and *HYDEF*.

^b For *HYDE/EF* Allele 1 represents *HYDE* and Allele 2 represents *HYDEF*.

^c Frequency, in percentage, of given allele found in sequenced transcriptome. NA- Frequency not applicable due to low coverage, type of SNP, or location in intron.

^d AA for allele and location of AA in polypeptide. nc- no AA change.