**Table S6 Blast search of the genome sequence assembly for carbohydrate metabolic genes in *Lupinus angustifolius.*** Genes showing SLG and SNP markers indicate that the scaffolds bearing the gene sequence were integrated into the sequenced-defined map.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Scalffold name** | **Annotation** | | | | **SLG** | | | **Marker names** | | |
| **Galactan biosynthesis** | | | | |  | | |  | | |
| scaffold71643 | | Galactosyl transferase GMA12/MNN10 family protein | | | | | | | |
| scaffold66319 | | Galactosyl transferase GMA12/MNN10 family protein | | | | | | | |
| scaffold84627 | | Galactosyl transferase GMA12/MNN10 family protein | | | | | | | |
| scaffold94955 | | Galactosyl transferase GMA12/MNN10 family protein | | | | | | | |
| scaffold1671 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold92549 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold30224 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold2992 | | Galactosyltransferase family protein | | SLG1 | | | AntjM2 | | |
| scaffold2992 | | Galactosyltransferase family protein | | SLG1 | | | DAFWA6620 | | |
| scaffold72257 | | Galactosyltransferase family protein | | SLG11 | | | DAFWA6249 | | |
| scaffold93179 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold42595 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold428 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold38882 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold7907 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold97670 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold22891 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold19344 | | Galactosyltransferase family protein | |  | | |  | | |
| C28716854 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold2965 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold3770 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold20622 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold96325 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold57641 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold33715 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold77013 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold48513 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold47824 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold92081 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold11466 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold71952 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold97243 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold7791 | | Galactosyltransferase family protein | |  | | |  | | |
| scaffold11638 | | Galactosyltransferase family protein | |  | | |  | | |
| **Galactan hydrolysis** | | | |  | | |  | | |
| scaffold89129 | | alpha-galactosidase 2 | |  | | |  | | |
| scaffold2022 | | alpha-galactosidase 2 | |  | | |  | | |
| scaffold26984 | | alpha-galactosidase 2 | |  | | |  | | |
| scaffold28589 | | alpha-galactosidase 2 | |  | | |  | | |
| scaffold21535 | | beta-galactosidase 10 | |  | | |  | | |
| scaffold25426 | | beta-galactosidase 12 | |  | | |  | | |
| scaffold48561 | | beta-galactosidase 17 | | SLG4 | | | iDAFWA656 | | |
| scaffold48561 | | beta-galactosidase 17 | | SLG4 | | | DAFWA6654 | | |
| scaffold10163 | | beta-galactosidase 3 | |  | | |  | | |
| scaffold34199 | | beta-galactosidase 3 | |  | | |  | | |
| scaffold54725 | | beta-galactosidase 3 | |  | | |  | | |
| scaffold95598 | | beta-galactosidase 3 | | SLG9 | | | DAFWA8129 | | |
| scaffold95598 | | beta-galactosidase 3 | | SLG9 | | | DAFWA1401 | | |
| scaffold936 | | beta-galactosidase 3 | |  | | |  | | |
| scaffold47980 | | beta-galactosidase 3 | |  | | |  | | |
| scaffold47142 | | beta-galactosidase 3 | |  | | |  | | |
| scaffold13641 | | beta-galactosidase 5 | |  | | |  | | |
| scaffold21927 | | beta-galactosidase 5 | |  | | |  | | |
| scaffold71273 | | beta-galactosidase 7 | |  | | |  | | |
| scaffold91038 | | beta-galactosidase 7 | | SLG1 | | | DAFWA7233 | | |
| scaffold77921 | | beta-galactosidase 8 | | SLG4 | | | DAFWA1958 | | |
| scaffold77921 | | beta-galactosidase 8 | | SLG4 | | | DAFWA683 | | |
| scaffold77921 | | beta-galactosidase 8 | | SLG4 | | | DAFWA1572 | | |
| scaffold67899 | | beta-galactosidase 8 | |  | | |  | | |
| scaffold89508 | | beta-galactosidase 8 | | SLG7 | | | DAFWA6648 | | |
| scaffold89508 | | beta-galactosidase 8 | | SLG7 | | | DAFWA7405 | | |
| scaffold89508 | | beta-galactosidase 8 | | SLG7 | | | DAFWA2067 | | |
| scaffold49286 | | beta galactosidase 1 | | SLG4 | | | DAFWA8402 | | |
| scaffold61537 | | beta galactosidase 1 | |  | | |  | | |
| scaffold95935 | | beta galactosidase 9 | |  | | |  | | |
| C28703208 | | beta galactosidase 9 | |  | | |  | | |
| scaffold24548 | | beta galactosidase 9 | |  | | |  | | |
| **Cellulose Biosynthesis** | | | |  | | |  | | |
| C28753894 | | cellulose synthase 1 | |  | | |  | | |
| scaffold98153 | | cellulose synthase 1 | |  | | |  | | |
| scaffold26856 | | cellulose synthase 6 | |  | | |  | | |
| scaffold87609 | | cellulose synthase 6 | |  | | |  | | |
| scaffold77336 | | cellulose synthase 6 | |  | | |  | | |
| scaffold94513 | | cellulose synthase 6 | |  | | |  | | |
| scaffold36074 | | cellulose synthase 6 | |  | | |  | | |
| scaffold64353 | | cellulose synthase 6 | |  | | |  | | |
| scaffold88213 | | cellulose synthase A4 | | SLG3 | | | DAFWA1860 | | |
| scaffold88213 | | cellulose synthase A4 | | SLG3 | | | DAFWA3353 | | |
| scaffold88213 | | cellulose synthase A4 | | SLG3 | | | DAFWA1730 | | |
| scaffold17741 | | cellulose synthase A4 | |  | | |  | | |
| scaffold85715 | | Cellulose synthase family protein | | SLG4 | | | DAFWA3848 | | |
| scaffold18216 | | Cellulose synthase family protein | |  | | |  | | |
| scaffold63375 | | cellulose synthase family protein | |  | | |  | | |
| scaffold68825 | | Cellulose synthase family protein | |  | | |  | | |
| scaffold70626 | | Cellulose synthase family protein | |  | | |  | | |
| scaffold70196 | | Cellulose synthase family protein | |  | | |  | | |
| scaffold82169 | | Cellulose synthase family protein | |  | | |  | | |
| scaffold23824 | | Cellulose synthase family protein | |  | | |  | | |
| **HemiCellulose biosynthesis** | | |  | | |  | | |
| scaffold3328 | | cellulose synthase like D4 | |  | | |  | | |
| scaffold39387 | | cellulose synthase like D4 | | SLG20 | | | DAFWA7520 | | |
| scaffold8374 | | cellulose synthase like E1 | |  | | |  | | |
| scaffold28041 | | cellulose synthase like E1 | |  | | |  | | |
| scaffold1820 | | cellulose synthase like G1 | |  | | |  | | |
| C28634930 | | cellulose synthase like G2 | |  | | |  | | |
| scaffold84882 | | cellulose synthase-like A02 | | SLG7 | | | DAFWA1377 | | |
| scaffold65124 | | cellulose synthase-like A02 | |  | | |  | | |
| scaffold84882 | | cellulose synthase-like A02 | | SLG7 | | | DAFWA6661 | | |
| scaffold70522 | | cellulose synthase-like A02 | |  | | |  | | |
| scaffold84882 | | cellulose synthase-like A02 | | SLG7 | | | iDAFWA534 | | |
| scaffold35157 | | cellulose synthase-like A02 | | SLG1 | | | DAFWA7012 | | |
| scaffold35157 | | cellulose synthase-like A02 | | SLG1 | | | DAFWA6646 | | |
| scaffold35157 | | cellulose synthase-like A02 | | SLG1 | | | DAFWA8678 | | |
| scaffold84882 | | cellulose synthase-like A02 | | SLG7 | | | DAFWA6684 | | |
| scaffold84882 | | cellulose synthase-like A02 | | SLG7 | | | DAFWA4082 | | |
| scaffold90138 | | cellulose synthase-like B4 | |  | | |  | | |
| scaffold60932 | | cellulose synthase-like B4 | |  | | |  | | |
| scaffold75580 | | cellulose synthase-like B4 | |  | | |  | | |
| scaffold75686 | | cellulose synthase-like B4 | |  | | |  | | |
| scaffold97687 | | cellulose synthase-like D1 | |  | | |  | | |
| scaffold73927 | | cellulose synthase-like D3 | |  | | |  | | |
| scaffold47935 | | cellulose synthase-like D3 | |  | | |  | | |
| scaffold45357 | | cellulose synthase-like D3 | |  | | |  | | |
| scaffold84654 | | Cellulose-synthase-like C12 | |  | | |  | | |
| scaffold88679 | | Cellulose-synthase-like C12 | |  | | |  | | |
| scaffold91140 | | Cellulose-synthase-like C12 | |  | | |  | | |
| scaffold70917 | | Cellulose-synthase-like C12 | |  | | |  | | |
| scaffold52979 | | Cellulose-synthase-like C12 | |  | | |  | | |
| scaffold79191 | | Cellulose-synthase-like C12 | |  | | |  | | |
| scaffold97660 | | Cellulose-synthase-like C12 | |  | | |  | | |
| scaffold71133 | | Cellulose-synthase-like C12 | |  | | |  | | |
| scaffold20757 | | Cellulose-synthase-like C4 | |  | | |  | | |
| scaffold48089 | | Cellulose-synthase-like C5 | |  | | |  | | |
| scaffold42844 | | Cellulose-synthase-like C6 | |  | | |  | | |
| scaffold83766 | | Cellulose-synthase-like C6 | |  | | |  | | |
| **Pectin biosynthesis and degradation** | | | |  | | |  | | |
| scaffold77431 | | Pectin lyase-like superfamily protein | | SLG4 | | | DAFWA8236 | | |
| scaffold69954 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold77431 | | Pectin lyase-like superfamily protein | | SLG4 | | | DAFWA6152 | | |
| C28542412 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold85000 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold4901 | | Pectin lyase-like superfamily protein | | SLG2 | | | DAFWA4571 | | |
| scaffold80858 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold96299 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C27517231 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C28504236 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C27523027 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold35813 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold60006 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold97324 | | Pectin lyase-like superfamily protein | | SLG13 | | | DAFWA5798 | | |
| scaffold25145 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold96760 | | Pectin lyase-like superfamily protein | | SLG7 | | | DAFWA5638 | | |
| scaffold86613 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold33236 | | Pectin lyase-like superfamily protein | | SLG8 | | | DAFWA329 | | |
| scaffold90800 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold33555 | | Pectin lyase-like superfamily protein | | SLG2 | | | DAFWA5230 | | |
| scaffold76840 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold83776 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold96760 | | Pectin lyase-like superfamily protein | | SLG7 | | | DAFWA2541 | | |
| scaffold10776 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold96627 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold34311 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold3456 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold31808 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold76629 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold83717 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold85194 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold98305 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold86807 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold80069 | | Pectin lyase-like superfamily protein | | SLG7 | | | DAFWA6507 | | |
| scaffold2680 | | Pectin lyase-like superfamily protein | | SLG1 | | | DAFWA3385 | | |
| scaffold2680 | | Pectin lyase-like superfamily protein | | SLG1 | | | DAFWA5893 | | |
| scaffold2680 | | Pectin lyase-like superfamily protein | | SLG1 | | | DAFWA5196 | | |
| scaffold80069 | | Pectin lyase-like superfamily protein | | SLG7 | | | DAFWA4688 | | |
| scaffold65717 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold80069 | | Pectin lyase-like superfamily protein | | SLG7 | | | DAFWA1082 | | |
| scaffold53502 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold80069 | | Pectin lyase-like superfamily protein | | SLG7 | | | DAFWA6038 | | |
| C28702346 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold98347 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold98350 | | Pectin lyase-like superfamily protein | | SLG6 | | | DAFWA1225 | | |
| scaffold532 | | Pectin lyase-like superfamily protein | | SLG2 | | | iDAFWA381 | | |
| C27863913 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold532 | | Pectin lyase-like superfamily protein | | SLG2 | | | DAFWA4751 | | |
| scaffold92983 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C28205085 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C28204033 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold65514 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold90834 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold92314 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold49638 | | Pectin lyase-like superfamily protein | | SLG14 | | | DAFWA7450 | | |
| scaffold68746 | | Pectin lyase-like superfamily protein | | SLG17 | | | DAFWA8547 | | |
| scaffold25389 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold93599 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold64060 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C28406540 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold96760 | | Pectin lyase-like superfamily protein | | SLG7 | | | DAFWA3978 | | |
| scaffold52451 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold84186 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold51663 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold97630 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold97638 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold87678 | | Pectin lyase-like superfamily protein | | SLG2 | | | DAFWA7284 | | |
| scaffold67758 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold84222 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold92399 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C28369954 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold5972 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold69181 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold79013 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold71143 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold74560 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold74609 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold89409 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold33555 | | Pectin lyase-like superfamily protein | | SLG2 | | | DAFWA6604 | | |
| scaffold1240 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold11693 | | Pectin lyase-like superfamily protein | | SLG2 | | | DAFWA6489 | | |
| scaffold898 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold62426 | | Pectin lyase-like superfamily protein | | SLG6 | | | DAFWA6058 | | |
| scaffold44386 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold62101 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold38142 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold85569 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold92000 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold38012 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold61840 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold45519 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold92748 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold40060 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold88721 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C27865679 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold73665 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold41246 | | Pectin lyase-like superfamily protein | | SLG18 | | | iDAFWA243 | | |
| scaffold42812 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold1712 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold55746 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C28678236 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold43558 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold9909 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold88836 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold99400 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold44126 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold5598 | | Pectin lyase-like superfamily protein | | SLG13 | | | iDAFWA102 | | |
| scaffold55998 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold94923 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold11693 | | Pectin lyase-like superfamily protein | | SLG2 | | | DAFWA1770 | | |
| scaffold72094 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold95421 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| C28650762 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold82738 | | Pectin lyase-like superfamily protein | |  | | |  | | |
| scaffold74940 | | pectin methylesterase 1 | |  | | |  | | |
| scaffold77251 | | pectin methylesterase 3 | |  | | |  | | |
| scaffold15666 | | pectin methylesterase 3 | | SLG2 | | | DAFWA4210 | | |
| scaffold72583 | | pectin methylesterase 3 | |  | | |  | | |
| scaffold62021 | | pectin methylesterase 3 | |  | | |  | | |
| scaffold3348 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold27292 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold20829 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold34511 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold67851 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold28908 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold98430 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold98417 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold50290 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| C28548972 | | pectin methylesterase inhibitor 1 | |  | | |  | | |
| scaffold85568 | | pectin methylesterase PCR fragment F | | SLG5 | | | iDAFWA633 | | |
| C28739410 | | Pectinacetylesterase family protein | | SLG13 | | | DAFWA7025 | | |
| C27601111 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold81045 | | Pectinacetylesterase family protein | | SLG12 | | | DAFWA4757 | | |
| scaffold1329 | | Pectinacetylesterase family protein | | SLG2 | | | DAFWA4291 | | |
| scaffold71004 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold43493 | | Pectinacetylesterase family protein | | SLG6 | | | DAFWA6871 | | |
| scaffold1329 | | Pectinacetylesterase family protein | | SLG2 | | | DAFWA3575 | | |
| scaffold1186 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold1329 | | Pectinacetylesterase family protein | | SLG2 | | | DAFWA3985 | | |
| scaffold43493 | | Pectinacetylesterase family protein | | SLG6 | | | DAFWA4660 | | |
| scaffold89845 | | Pectinacetylesterase family protein | | SLG9 | | | DAFWA3347 | | |
| scaffold92653 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold97326 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold87390 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold53467 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold28761 | | Pectinacetylesterase family protein | | SLG6 | | | DAFWA5444 | | |
| scaffold81390 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold2931 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold16815 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold89111 | | Pectinacetylesterase family protein | | SLG6 | | | DAFWA3080 | | |
| scaffold60519 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold92099 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold89111 | | Pectinacetylesterase family protein | | SLG6 | | | DAFWA6090 | | |
| scaffold19203 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold89111 | | Pectinacetylesterase family protein | | SLG6 | | | DAFWA4484 | | |
| scaffold69443 | | Pectinacetylesterase family protein | |  | | |  | | |
| scaffold83471 | | galacturonosyltransferase 1 | |  | | |  | | |
| scaffold71636 | | galacturonosyltransferase 1 | | SLG1 | | | DAFWA2590 | | |
| scaffold24236 | | galacturonosyltransferase 1 | |  | | |  | | |
| scaffold15767 | | galacturonosyltransferase 10 | |  | | |  | | |
| scaffold95610 | | galacturonosyltransferase 10 | |  | | |  | | |
| scaffold76263 | | galacturonosyltransferase 10 | |  | | |  | | |
| scaffold73221 | | galacturonosyltransferase 11 | |  | | |  | | |
| scaffold32853 | | galacturonosyltransferase 13 | |  | | |  | | |
| scaffold4579 | | galacturonosyltransferase 13 | | SLG8 | | | DAFWA7446 | | |
| scaffold92874 | | galacturonosyltransferase 13 | |  | | |  | | |
| scaffold32854 | | galacturonosyltransferase 13 | |  | | |  | | |
| scaffold91548 | | galacturonosyltransferase 13 | |  | | |  | | |
| scaffold64896 | | galacturonosyltransferase 15 | | SLG2 | | | DAFWA4927 | | |
| scaffold92190 | | galacturonosyltransferase 4 | |  | | |  | | |
| scaffold81673 | | galacturonosyltransferase 4 | | SLG14 | | | DAFWA6986 | | |
| scaffold77369 | | galacturonosyltransferase 4 | |  | | |  | | |
| scaffold1445 | | galacturonosyltransferase 6 | |  | | |  | | |
| scaffold82764 | | galacturonosyltransferase 7 | | SLG1 | | | DAFWA4465 | | |
| scaffold66386 | | galacturonosyltransferase 9 | |  | | |  | | |
| scaffold71955 | | galacturonosyltransferase-like 2 | |  | | |  | | |
| scaffold55099 | | galacturonosyltransferase-like 2 | |  | | |  | | |
| scaffold5722 | | galacturonosyltransferase-like 2 | |  | | |  | | |
| scaffold72048 | | galacturonosyltransferase-like 4 | |  | | |  | | |
| scaffold83440 | | galacturonosyltransferase-like 4 | |  | | |  | | |
| scaffold21301 | | galacturonosyltransferase-like 4 | | SLG15 | | | DAFWA3235 | | |
| scaffold21301 | | galacturonosyltransferase-like 4 | | SLG15 | | | DAFWA2951 | | |