

Supplementary Fig. 1 Quantitative gel densitometry measurements of B-group proteins in *Glu-B3* NILs as determined using NIL ImageJ software program. Data points were normalized with respect to the Aroona value.

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A3-643/FJ549929 ISQQQPPEPFSQQQPPFSQQQPPFSQQQSPFSQ---QQQPPFLQQQPPFSQQPFISSQQQPPFSQQQPFSSQQQPPYSQQQPPYSQQQPPF : 97
A3-620/FJ549930 ISQ-----CQQQPPFSQQQPPFSQQQSPFSQ---QQQPPFLQQQPPFSQQPFISSQQQPPFSQQQPFSSQQQPPYSQQQPPYSQQQPPF : 89
A3-646/FJ549932 ISQQQPPEPFSQQQPPFSQQQPPFSQQQSPFSQ---QQQPPFSQQQPPFSQQPFISSQQQPFSSQQQPPYSQQQPPYSQQQPPF : 97
A3-573/FJ549933 ISQQQPPEPFSQQQPPFSQQQPPFSQQQSPFSQ---QQQPPFAQQQPPFSQQPFISSQQQPPFSQQQPFSSQQQPPYSQQQPPYSQQQPPF : 97
A3-662/FJ549945 ISQQQPPEPFSQQQPPFSQQQPPFSQQQSPFSQ---QQQPPFLQQQPPFSQQPFISSQQQPPFSQQQPFSSQQQPPYSQQQPPYSQQQPPF : 100
A3-568/FJ549931 ISQQQPPEPFSQQQPPFSQQQPPFSQQQSPFSQ---QQQPPFSQQQPPFSQQPFISSQQQPFSSQQQPFSSQQQPPYSQQQPPYSQQQPPF : 96

A3-643/FJ549929 SQQQQPPFSQQQPPFSQ---CQQQPPFTQQQPPFSQQPPISQQ---C---PFTQC-----CQPPFSQCPPISSQQQPPF : 172
A3-620/FJ549930 SQQQQPPFSQQQPPFSQ---CQQQPPFTQQQPPFSQQPPISQQ---C---PFTQC-----CQPPFSQCPPISSQQQPPF : 164
A3-646/FJ549932 SQQQQPPFSQQQPPFSQ---CQQQPPFTQQQPPFSQQSPISQQ---C---PFTQC-----CQPPFSQCPPISSQQQPPF : 173
A3-573/FJ549933 SQQQQPPFS-----CQQQPPFTQQQ---CQQQ---PFTQC-----CQPPFSQCPPISSQQQPPF : 149
A3-662/FJ549945 SQQQQPPFS-----CQQQPPFSQQQ---CQQQ---CQPPFTQQQPPFSQCPPISSQQQPPYSQQQPPFTC---CQPPFSQCPPISSQQQPPF : 179
A3-568/FJ549931 SQQQQPPFS-----CQQQPPFSQQQ---CQC---PFTQC-----CQPPFSQCPPISSQQQPPF : 145

A3-643/FJ549929 SQQQPPEPFSQQQIPVIHPSVLQQLNPKVFLQQCCI PVAMQRCLARSQMLQCSI CHVMCQCCQQLRQIPEQSRHESIRAIIVSYIILCQQQQQQQQ : 272
A3-620/FJ549930 SQQQPPEPFSQQQIPVIHPSVLQQLNPKVFLQQCCI PVAMQRCLARSQMLQCSI CHVMCQCCQQLRQIPEQSRHESIRAIIVSYIILCQQQQQQQQ : 264
A3-646/FJ549932 SQQQPPEPFSQQQIPVIHPSVLQQLNPKVFLQQCCI PVAMQRCLARSQMLQCSI CHVMCQCCQQLRQIPEQSRHESIRAIIVSYIILCQQQQQQQQ : 273
A3-573/FJ549933 IQQRPPFSRQQQIPVIHPSVLQQLNPKVFLQQCCI PVAMQRCLARSQMLQCSI CHVMCQCCQQLRQIPEQSRHESIRAIIVSYIILCQQQQQQQQ : 249
A3-662/FJ549945 SQQQPPEPFSQQQIPVIHPSVLQQLNPKVFLQQCCI PVAMQRCLARSQMLQCSI CHVMCQCCQQLRQIPEQSRHESIRAIIVSYIILCQQQQQQQQ : 278
A3-568/FJ549931 SQQQPPEPFSQQQIPVIHPSVLQQLNPKVFLQQCCI PVAMQRCLARSQMLQCSI CHVMCQCCQQLRQIPEQSRHESIRAIIVSYIILCQQQQQQQQ : 244

A3-643/FJ549929 ---GQSIIQYQQCPQQLGQCVSQPQQQLQQQLGQQPQQQLAHGTFIQPHQIAQLEVMTSIALRLEFMCSVNVPLYETTTSVPLGVGIGVGVY : 364
A3-620/FJ549930 ---GQSIIQYQQCPQQLGQCVSQPQQQLQQQLGQQPQQQLAHGTFIQPHQIAQLEVMTSIALRLEFMCSVNVPLYETTTSVPLGVGIGVGVY : 356
A3-646/FJ549932 QQQQGQSIIQYQQCPQQLGQCVSQPQQQLQQQLGQQPQQQLAHGTFIQPHQIAQLEVMTSIALRLEFMCSVNVPLYETTTSVPLGVGIGVGVY : 369
A3-573/FJ549933 Q---GQSIIQYQQCPQQLGQCVSQPQQQLQQQLGQQPQQQLAH-----QIAQLEVMTSIALRLEFMCSVNVPLYETTTSVPLGVGIGVGVY : 336
A3-662/FJ549945 ---GQSIIQYQQCPQQLGQCVSQPQQQLQQQLGQQPQQQLAHGTFIQPHQIAQLEVMTSIALRLEFMCSVNVPLYETTTSVPLGVGIGVGVY : 370
A3-568/FJ549931 ---GQSIIQYQQCPQQLGQCVSQPQQQLQQQLGQQPQQQLAHGTFIQPHQIAQLEVMNLSIALRLEFMCSVNVPLYETTTSVPLGVGIGVGVY : 336

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Supplementary Fig. 2 Sequence alignments of i-type proteins identified in Aroona NILs.

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B3-530-1/EU369724 METSHIPSLKPLQQQLPLLQQLWYQQQPIQQQPQFFPQQPPCSQQQQPPLSQQQQPPFSQQQPPFSQQQQPVLPPQPPFSQQ : 85
B3-530-3/EU369729 METSHIPSLKPLQQQLPLLQQLWYQQQPIQQQPQFFPQQPPCSQQQQPPLSQQQQPPFSQQQPPFSQQQQPVLPPQPPFSQQ : 85
B3-530-2/EU369719 METSHIPSLKPLQQQLPLLQQLWYQQQPIQQQPQFFPQQPPCSQQQQPPLSQQQQPPFSQQQPPFSQQQQPVLPPQPPFSQQ : 85
B3-510/EU369720 METSHIPSLKPLQQQLPLLQQLWYQQQPIQQQPQFFPQQPPCSQQQQPPLSQQQQPPFSQQQPPFSQQQQPVLPPQPPFSQQ : 85

B3-530-1/EU369724 QQQFPQQQLPLLPQQPPFSQQQPPFSQQQQPPFSQQQQCPILIQQPPFSQHQQPVLPPQQIPSVQPSILQQLNPKVFLQQQCS : 170
B3-530-3/EU369729 QQQFPQQQLPLLPQQPPFSQQQPPFSQQQQPPFSQQQQCPILIQQPPFSQHQQPVLPPQQIPSVQPSILQQLNPKVFLQQQCS : 170
B3-530-2/EU369719 QQQFPQQQLPLLPQQPPFSQQQPPFSQQQQPPFSQQQQCPILIQQPPFSQHQQPVLPPQQIPSVQPSILQQLNPKVFLQQQCS : 170
B3-510/EU369720 -----CQQLLPQQPPFSQQQPPFSQQQQPPFSQQQQCPILIQQPPFSQHQQPVLPPQQIPSVQPSILQQLNPKVFLQQQCS : 163

B3-530-1/EU369724 PVAMPQSLARSQLWQSSCHVMQQQCCRQLPQIPEQSRDYDAIRAIISIVLQEQQHGQGLNQPQQQPQQSVQGVSQPQQQKQL : 255
B3-530-3/EU369729 PVAMPQSLARSQLWQSSCHVMQQQCCRQLPQIPEQSRDYDAIRAIISIVLQEQQHGQGLNQPQQQPQQSVQGVSQPQQQKQL : 255
B3-530-2/EU369719 PVAMPQSLARSQLWQSSCHVMQQQCCRQLPQIPEQSRDYDAIRAIISIVLQEQQHGQGLNQPQQQPQQSVQGVSQPQQQKQL : 255
B3-510/EU369720 PVAMPQSLARSQLWQSSCHVMQQQCCRQLPQIPEQSRDYDAIRAIISIVLQEQQHGQGLNQPQQQPQQSVQGVSQPQQQKQL : 248

B3-530-1/EU369724 GQCSFQQPQQQLGQWPQQQVPQGTLLQPHQIAQLEVMTSIALRTLPTMCSVNVVYGTITIVPFGVTRVGAY : 330
B3-530-3/EU369729 GQCSFQQPQQQLGQWPQQQVPQGTLLQPHQIAQLEVMTSIALRTLPTMCSVNVVYGTITIVPFGVTRVGAY : 330
B3-530-2/EU369719 GQCSFQQPQQQLGQWPQQQVPQGTLLQPHQIAQLEVMTSIALRTLPTMCSVNVVYGTITIVPFGVTRVGAY : 330
B3-510/EU369720 GQCSFQQPQQQLGQWPQQQVPQGTLLQPHQIAQLEVMTSIALRTLPTMCSVNVVYGTITIVPFGVTRVGAY : 323

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Supplementary Fig. 3 Sequence alignments of the B3-530 protein and its allelic variants identified in Aroona NILs.

B3-544/EU369703 MENSHPGLERPSQQQPLPPQQLSHQQPQQPIQQQPQQFPQQQPCSQQQQQQQQQQQQQQ-----E-LSQQ : 67
B3-593/EU369699 MENSHPGLERPSQQQPLPPQQLSHQQPQQPIQQQPQQFPQQQPCSQQQQQQQQQQQQQQQQQQQQQQ-----PLSQQQQPPFSQQ : 84
B3-601/EU369702 MENSHPGLERPSQQQPLPPQQLSHQQPQQPIQQQPQQFPQQQPCSQQQQQQQQQQQQQQQQQQQQQQ-----PLSQQQQPPFSQQ : 86
B3-607/EU369700 MENSHPGLERPSQQQPLPPQQLSHQQPQQPIQQQPQQFPQQQPCSQQQQQQQQQQQQQQQQQQQQQQ-----PLSQQQQPPFSQQ : 88

B3-544/EU369703 QQPFFSQQQPPFSQQQPVLPQQPSFSQQQLPPFSQQQPPFSQQQPVLPQQPPFSQQQQQ-----PILPQQPSFSQQQQQLVLPQQQIPF : 154
B3-593/EU369699 QQPFFSQQQPPFSQQQPVLPQQPSFSQQQLPPFSQQQPPFSQQQPVLPQQPPFSQQQQQ-----PILPQQPSFSQQQQQLVLPQQQIPF : 171
B3-601/EU369702 QQPFFSQQQPPFSQQQPVLPQQPSFSQQQLPPFSQQQPPFSQQQPVLPQQPPFSQQQQQ-----PILPQQPSFSQQQQQLVLPQQQIPF : 174
B3-607/EU369700 QQPFFSQQQPPFSQQQPVLPQQPSFSQQQLPPFSQQQPPFSQQQPVLPQQPPFSQQQQQ-----PILPQQPSFSQQQQQLVLPQQQIPF : 176

B3-544/EU369703 VHPSILQQLNPCKVFLQQCCSPVAMPQSLARSQMLQQSSCHVMQQCCQQLPQIPQQSRYEAIRAIIYSIVLQEQQQVRSIQTTQQCC : 242
B3-593/EU369699 VHPSILQQLNPCKVFLQQCCSPVAMPQSLARSQMLQQSSCHVMQQCCQQLPQIPQQSRYEAIRAIIYSIVLQEQQQVRSIQTTQQCC : 259
B3-601/EU369702 VHPSILQQLNPCKVFLQQCCSPVAMPQSLARSQMLQQSSCHVMQQCCQQLPQIPQQSRYEAIRAIIYSIVLQEQQQVRSIQTTQQCC : 262
B3-607/EU369700 VHPSILQQLNPCKVFLQQCCSPVAMPQSLARSQMLQQSSCHVMQQCCQQLPQIPQQSRYEAIRAIIYSIVLQEQQQVRSIQTTQQCC : 264

B3-544/EU369703 PQQLGCCVSPQQQQSQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPMPCRNVNPLYRTTTTVPFGVGTGVGAY : 323
B3-593/EU369699 PQQLGCCVSPQQQQSQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPMPCRNVNPLYRTTTTVPFGVGTGVGAY : 340
B3-601/EU369702 PQQLGCCVSPQQQQSQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPMPCRNVNPLYRTTTTVPFGVGTGVGAY : 343
B3-607/EU369700 PQQLGCCVSPQQQQSQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPMPCRNVNPLYRTTTTVPFGVGTGVGAY : 345

Supplementary Fig. 4 Sequence alignments of the B3-544/593/601/607 proteins identified in Aroona NILs.

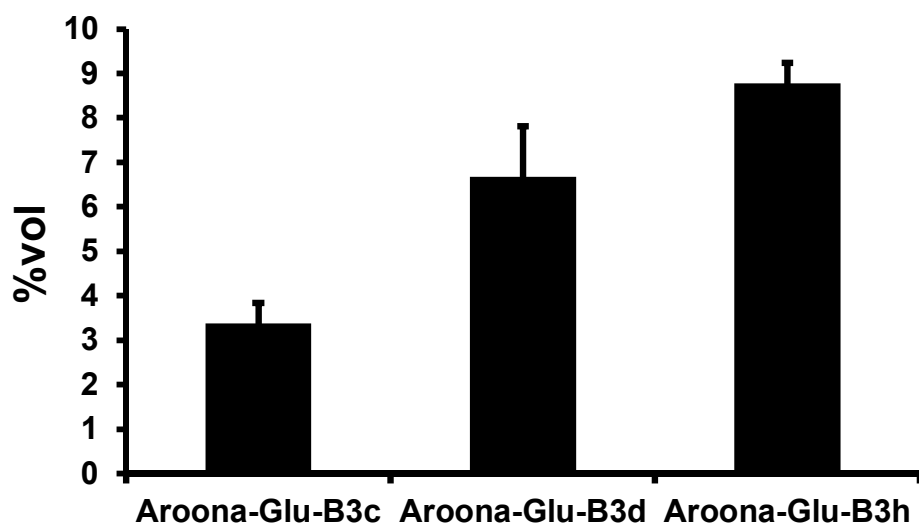
B3-624/EU369704 MENSHPGLERPSQQQLPQQTLSHHQQQPPIQQQPHQFQQQPCSQQQQPLSQQQPFFSQCCPPFFSQCC-----GLSC : 80
 B3-621-2/EU369705 MENSHPGLERPSQQQLPQQTLSHHQQQPPIQQQPHQFQQQPCSQQQQPLSQQQPFFSQCCPPFFSQCC-----GLSC : 79
 B3-621-1/EU369721 MENSHPGLERPSQQQLPQQTLSHHQQQPPIQQQPHQFQQQPCSQQQQPLSQQQPFFSQCCPPFFSQCC-----GLSC : 79
 B3-688-2/EU369716 MENSHPGLERPSQQQLPQQTLSHHQQQPPIQQQPHQFQQQPCSQQQQPLSQQQPFFSQCCPPFFSQCCPVLPPQPSFSQQQLBFSQ : 95
 B3-688-4/EU369718 MENSHPGLERPSQQQLPQQTLSHHQQQPPIQQQPHQFQQQPCSQQQQPLSQQQPFFSQCCPPFFSQCCPVLPPQPSFSQQQLBFSQ : 95
 B3-688-1/EU369715 MENSHPGLERPSQQQLPQQTLSHHQQQPPIQQQPHQFQQQPCSQQQQPLSQQQPFFSQCCPPFFSQCCPVLPPQPSFSQQQLBFSQ : 95
 B3-688-3/EU369717 MENSHPGLERPSQQQLPQQTLTHHQQQPPIQQQPHQFQQQPCSQQQQPLSQQQPFFSQCCPPFFSQCCPVLPPQPSFSQQQLBFSQ : 95

B3-624/EU369704 QQQPFFSQCC-----PFFSQCCPPFFSQCCPPFSQQQPVLPPQCFSSQQQLPPFSQQSPFFSQCCIVLCCQPPFLCQQC--FSLPQQPPFS : 166
 B3-621-2/EU369705 QQQPFFSQCC-----PFFSQCCPPFFSQCCPPFSQQQPVLPPQCFSSQQQLPPFSQQSPFFSQCCIVLCCQPPFLCQQC--FSLPQQPPFS : 165
 B3-621-1/EU369721 QQQPFFSQCC-----PFFSQCCPPFFSQCCPPFSQQQPVLPPQCFSSQQQLPPFSQQSPFFSQCCIVLCCQPPFLCQQC--FSLPQQPPFS : 165
 B3-688-2/EU369716 QQQPFFSQCCQPVLPPQCFSSQQQLPPFFSQCCPPFSQQQPVLPPQCFSSQQQLPPFSQQLEPFFSQCCPVLCCQPPFSQQQQ--FSLPQQPPFS : 189
 B3-688-4/EU369718 QQQPFFSQCCQPVLPPQCFSSQQQLPPFFSQCCPPFSQQQPVLPPQCFSSQQQLPPFSQQLEPFFSQCCPVLCCQPPFSQQQQ--FSLPQQPPFS : 189
 B3-688-1/EU369715 QQQPFFSQCCQPVLPPQCFSSQQQLPPFFSQCCPPELQQQPVLPPQCFSSQQQLPPFSQQLEPFFSQCCPVLCCQPPFSQQQQ--FSLPQQPPFS : 189
 B3-688-3/EU369717 QQQPFFSQCCQPVLPPQCFSSQQQLPPFFSQCCPPFSQQQPVLPPQCFSSQQQLPPFSQQLEPFFSQCCPVLCCQPPFSQQQQ--FSLPQQPPFS : 189

B3-624/EU369704 QQCCQLVLPQQIPFVHPSILQQLNPKVFLQQCCSPVAMPQSLARSQMLQCSCHVMQQCCQQLPQIPCCSRYEAIRAIYSIILQECCQVQG : 261
 B3-621-2/EU369705 QQCCQLVLPQQIPFVHPSILQQLNPKVFLQQCCSPVAMPQSLARSQMLQCSCHVMQQCCQQLPQIPCCSRYEAIRAIYSIILQECCQVQG : 260
 B3-621-1/EU369721 QQCCQLVLPQQIPFVHPSILQQLNPKVFLQQCCSPVAMPQSLARSQMLQCSCHVMQQCCQQLPQIPCCSRYEAIRAIYSIILQECCQVQG : 260
 B3-688-2/EU369716 QQCH--EVLVQQIPFVHPSILQQLNPKVFLQQCCSPVAMPQSLARSQMLQCSCHVMQQCCQQLPQIPCCSRYEAIRAIVYSIILQECCQVQG : 283
 B3-688-4/EU369718 QQCC--EVLVQQIPFVHPSILQQLNPKVFLQQCCSPVAMPQSLARSQMLQCSCHVMQQCCQQLPQIPCCSRYEAIRAIVYSIILQECCQVQG : 283
 B3-688-1/EU369715 QQCC--EVLVQQIPFVHPSILQQLNPKVFLQQCCSPVAMPQSLARSQMLQCSCHVMQQCCQQLPQIPCCSRYEAIRAIVYSIILQECCQVQG : 283
 B3-688-3/EU369717 QQCH--EVLVQQIPFVHPSILQQLNPKVFLQQCCSPVAMPQSLARSQMLQCSCHVMQQCCQQLPQIPCCSRYEAIRAIVYSIILQECCQVQG : 283

B3-624/EU369704 SIQTQQQPQQLGQCVSQPQQCSQQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPTMCRVNVVLYRTTTSVPPFGVGTGVGSY : 350
 B3-621-2/EU369705 SIQTQQQPQQLGQCVSQPQQCSQQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPTMCRVNVVLYRTTTSVPPFGVGTGVGSY : 349
 B3-621-1/EU369721 SIQTQQQPQQLGQCVSQPQQCSQQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPTMCRVNVVLYRTTTSVPPFGVGTGVGSY : 349
 B3-688-2/EU369716 SIQTQQQPQQLGQCVSQPQQCSQQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPTMCRVNVVLYRTTTSVPPFGVGTGVGSY : 372
 B3-688-4/EU369718 SIQTQQQPQQLGQCVSQPQQCSQQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPTMCRVNVVLYRTTTSVPPFGVGTGVGSY : 372
 B3-688-1/EU369715 SIQTQQQPQQLGQCVSQPQQCSQQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPTMCRVNVVLYRTTTSVPPFGVGTGVGSY : 372
 B3-688-3/EU369717 SIQTQQQPQQLGQCVSQPQQCSQQQLGQQPQQQLAQGTFLQPHQIAQLEVMTSIALRTLPTMCRVNVVLYRTTTSVPPFGVGTGVGSY : 372

Supplementary Fig. 5 Sequence alignments of the B3-621/624 and B3-688 proteins identified in Aroona NILs.



Supplementary Fig. 6 The differential display of B3-688 spots among *Aroona-Glu-B3c*, *B3d* and *B3h*. Spot volume values are expressed in percentages (%vol) of the total proteome