

**S3 Table. Peptides identified in each isolated barley gluten protein type.** Peptide sequences, their scores, *m/z* ratios, charge states and relative molecular weights (*M<sub>r</sub>*). For corresponding protein sequences, see S7 Table.

Abbreviation	Gluten protein type Peptide sequence	Peptide score	<i>m/z</i> (charge state)	<i>M<sub>r</sub></i>
<b>D-hordeins</b>				
D.1	YYPDQTSSQQSW	69	745.15 (+2)	1488.62
D.2	LQPGQGQQGPY	61	586.70 (+2)	1171.57
D.3	TQQKPGQGYNPGGTSP	55	863.26 (+2)	1728.85
HS+D	KVAKAQQ	46	443.12 (+2)	884.55
D.4	SQVVRQY	40	440.07 (+2)	878.47
D.5	QSATSPQQPGQGQQQETYPYIATSPHQPGQW	21	1107.38 (+3)	3318.54
D.6	QSATSPQQPGQGQQQEPYIATSPHQPGQW	19	1105.88 (+3)	3314.54
D.7	GGGLTTEQPQGGKQPF	17	801.17 (+2)	1600.79
D.8	SYPSATFPQQPGQGQQGQGYYPGATSL	17	938.98 (+3)	2814.30
<b>C-hordeins</b>				
C.1	QPQQPFPQPQQPIAHQPQQPF	57	822.88 (+3)	2465.23
C.2	QPQQPFPQPQQPLPRPQQPFPW	56	932.28 (+3)	2793.42
C.3	QPQQPFPQPQQPFPLQPQQPFPW	52	929.35 (+3)	2784.39
C.4	LQQPYPQNPY	49	624.21 (+2)	1246.61
C.5	IIPQQPQQPLPLQPHQPY	47	708.18 (+3)	2121.14
C.6	IIPQQPQQPFPLQPHQPY	41	719.37 (+3)	2155.13
C.7	SFSQQPQQPFPL	39	702.21 (+2)	1402.70
C.8	RQLNPSSQEL	39	586.17 (+2)	1170.61
C.9	LPQQPFPVQQPF	33	713.29 (+2)	1424.75
C.10	LPQKFPVQQPF	33	713.29 (+2)	1424.79
C.11	SQQPQQPFPLQPQQPFPQQPQQPFPQQPQQIF	25	1309.13 (+3)	3923.98
<b>γ-hordeins within γ/B-hordeins</b>				
yh.1	VLPQQQAQF	50	529.69 (+2)	1057.56
yh.2	AQQQPSIEEQHQL	50	767.98 (+2)	1534.74
yh.3	TQQPYPQQQL	40	664.12 (+2)	1326.66
yh.4	QPQQQPFPQQKPF	22	863.24 (+2)	1724.87
<b>B-hordeins within γ/B-hordeins</b>				
B.1	SIVLQEQPL	65	513.66 (+2)	1025.58
B.2	SIVLQEQSL	62	508.66 (+2)	1015.56
B.3	QQPQPQQLGQPQQVPQSVF	57	1081.65 (+2)	2161.10
B.4	QQPQPQQGQQQQVPQSVF	55	1040.67 (+2)	2079.02
B.5	SIVLQEQPQQL	52	641.62 (+2)	1281.70
B.6	LQEQQDQMLL	49	623.19 (+2)	1244.61
B.7	RIVPLAIDTRGV	49	470.48 (+3)	1407.86
B.8	QQPQPQQVGGQQQQVPQSAF	46	717.64 (+3)	2150.06
B.9	RGVGPSVGV	41	414.15 (+2)	826.47
B.10	RHEAVRAIVY	40	607.20 (+2)	1212.68
B.11	AIDTRGV	39	415.59 (+2)	829.47
B.12	LQPHQLAQL	39	524.15 (+2)	1046.59
LG+B	LQPHQIAQL	39	524.15 (+2)	1046.59
B.13	VQVQIPF	33	415.64 (+2)	829.47
B.14	RHEAIRAIVY	31	614.23 (+2)	1226.70
B.15	GIDTRGV	24	408.60 (+2)	815.46
B.16	LQLQIQY	22	904.77 (+1)	904.51

B.17	LQPHQIAQLEATTSIAL	19	917.59 (+2)	1833.01
B.18	RILRGVGPSVGV	17	605.25 (+2)	1208.74
B.19	FQQPQPQQLGQPQQVPQSVF	15	770.44 (+3)	2308.17
<b>B-hordeins within B/<math>\gamma</math>-hordeins</b>				
B.2	SIVLQEQSL	69	508.66 (+2)	1015.56
B.4	QQPQPQQGQQQQVPQSVF	57	1040.32 (+2)	2079.02
B.7	RIVPLAIDTRVGV	51	470.22 (+3)	1407.86
B.1	SIVLQEQPL	50	513.67 (+2)	1025.58
B.3	QQPQPQQLGQPQQVPQSVF	47	1081.31 (+2)	2161.10
B.8	QQPQPQQVGQQQQVPQSAF	44	1076.23 (+2)	2150.06
B.10	RHEAVRAIVY	41	607.15 (+2)	1212.68
B.9	RGVGPSVGV	40	414.09 (+2)	826.47
B.11	AIDTRVGV	37	415.61 (+2)	829.47
B.14	RHEAIRAIVY	37	409.79 (+3)	1226.34
LG+B	LQPHQIAQL	33	524.17 (+2)	1046.59
B.13	VQVQIPF	33	415.64 (+2)	829.47
B.18	RILRGVGPSVGV	27	605.18 (+2)	1208.74
B.20	VLQQQCCQQLPQIQEQF	15	1014.30 (+2)	2028.98
<b><math>\gamma</math>-hordeins within B/<math>\gamma</math>-hordeins</b>				
$\gamma$ h.2	AQQQPSIEEQHQL	44	768.22 (+2)	1534.74
$\gamma$ h.3	TQQPYPQQQPL	20	665.16 (+2)	1326.66