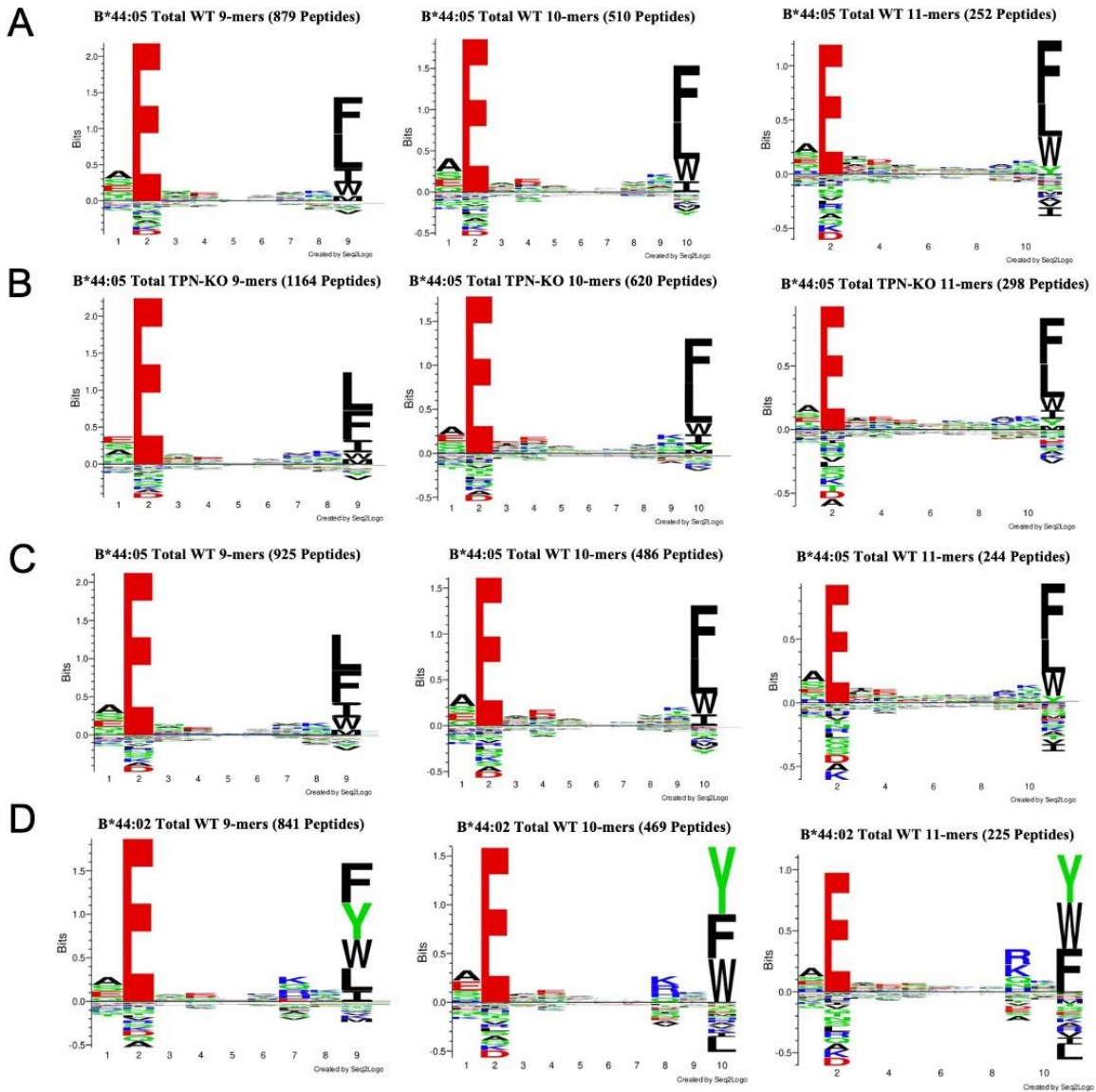


1 **Supplemental Information**

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4 **Supplemental Figure 1. Seq2Logo motifs for the total peptide groups: A and B)** Seq2Logo

5 motifs for the total peptides for the B*44:05-WT (A) and B*44:05-TPN-KO (B) comparisons are

6 shown, corresponding to Figure 2. **C and D)** Seq2Logo motifs for the total set of peptides for

7 B*44:05 (C) and B*44:02 (D) comparisons are shown, corresponding to Figure 3.

A Peptide distributions: B*44:05-WT vs. B*44:05-TPN-KO

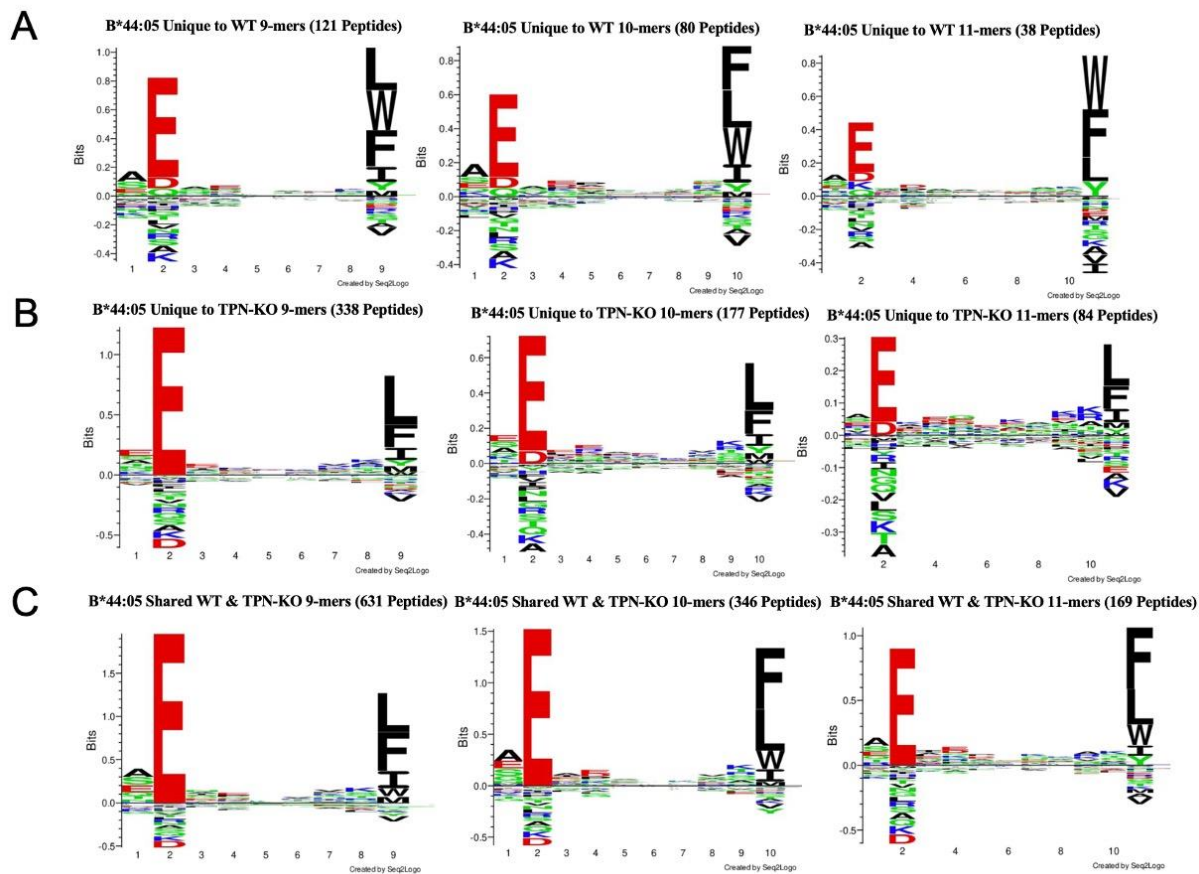
Peptide Distributions							
B*44:05-TPN-KO Shared and Unique	B*44:05-WT Shared and Unique						
	6	5	4	3	2	1	0
6	99	97	54	39	30	16	20
5	43	64	51	48	33	38	42
4	14	49	53	59	64	62	70
3	13	34	37	68	71	103	173
2	2	16	47	83	119	207	474
1	0	16	24	77	176	369	324
0	0	4	19	68	181	313	

B Peptide distributions: B*44:05-WT vs. B*44:02-WT

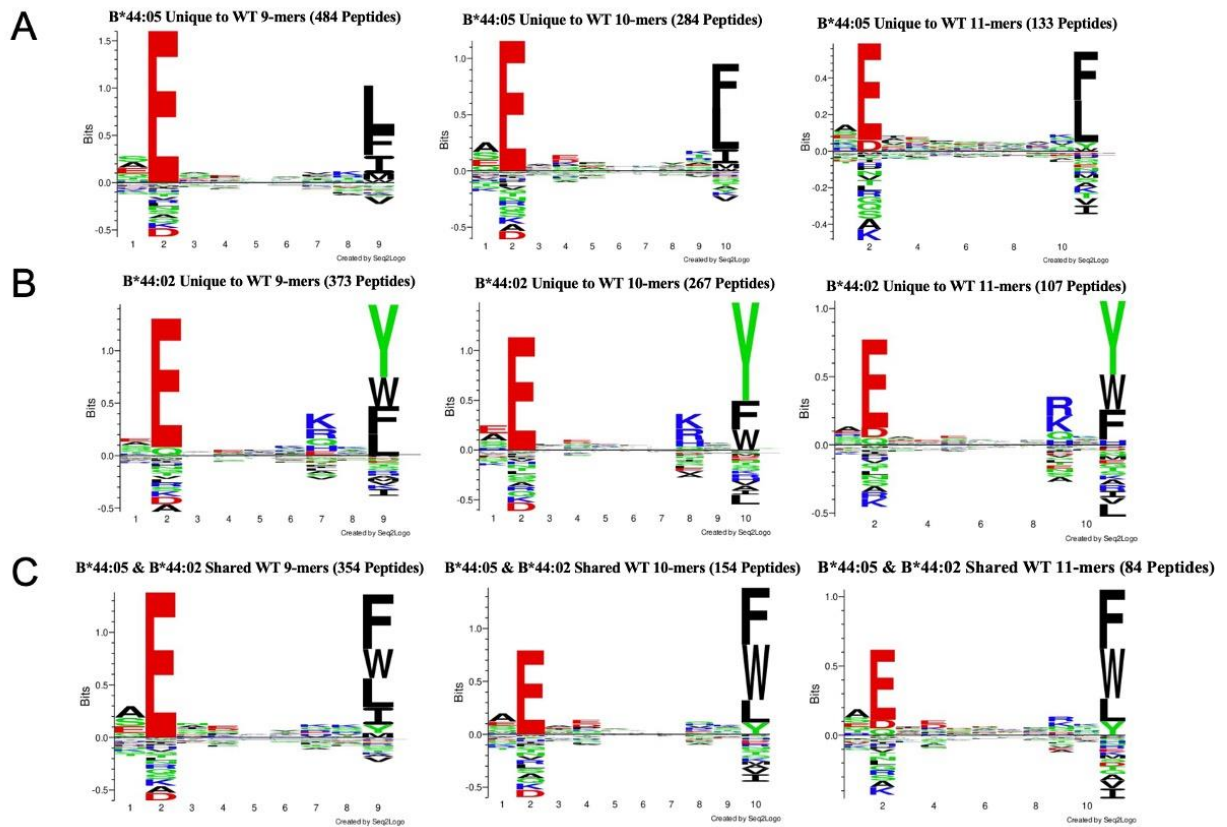
Peptide Distribution							
B*44:05-WT Shared and Unique	B*44:02-WT Shared and Unique						
	6	5	4	3	2	1	0
6	46	22	19	10	12	13	40
5	34	36	25	30	17	19	113
4	16	26	18	18	20	35	130
3	20	20	23	26	36	40	195
2	14	29	31	47	78	86	571
1	13	27	39	67	103	259	720
0	121	120	115	186	311	224	

14

15 **Supplemental Figure 2: Grouping of peptides into unique and shared sets:** A) The table shows
 16 the distribution of the full set of peptides identified from six MS/MS runs grouped into those
 17 unique to B*44:05-WT (red), those unique to B*44:05-TPN-KO (blue) and those shared across
 18 both B*44:05-WT and B*44:05-TPN-KO conditions (green). B) The table shows the distribution
 19 of the full set of peptides identified from six MS/MS runs grouped into those unique to B*44:05-
 20 WT (red), those unique to B*44:02-WT (blue) and those shared across both B*44:05-WT and
 21 B*44:02-WT conditions (green).



1
2 **Supplemental Figure 3: Seq2Logo motifs for the unique and shared peptide groups in the**
3 **B*44:05 vs B*44:05-Tapasin-KO comparisons: A-C)** Seq2Logo motifs for 9-mer, 10-mer, and
4 11-mer peptides grouped into the peptides unique to B*44:05-WT (A), unique to B*44:05-TPN-
5 KO (B) and shared across the two conditions (C) using the unique and shared peptide sets defined
6 in Supplemental Figure 2A.



1

2 **Supplemental Figure 4: Seq2Logo motifs for the unique and shared peptide groups in the**
 3 **B*44:05 vs B*44:02 comparisons: A-C) Seq2Logo motifs for 9-mer, 10-mer, and 11-mer**
 4 **peptides among the peptides unique to B*44:05 (A), unique to B*44:02 (B) and shared between**
 5 **B*44:02 and B*44:05 (C) using the unique and shared peptide sets defined in Supplemental Figure**
 6 **2B.**