Supporting Information

Dissecting Human Skeletal Muscle Troponin Proteoforms by Top-down Mass Spectrometry

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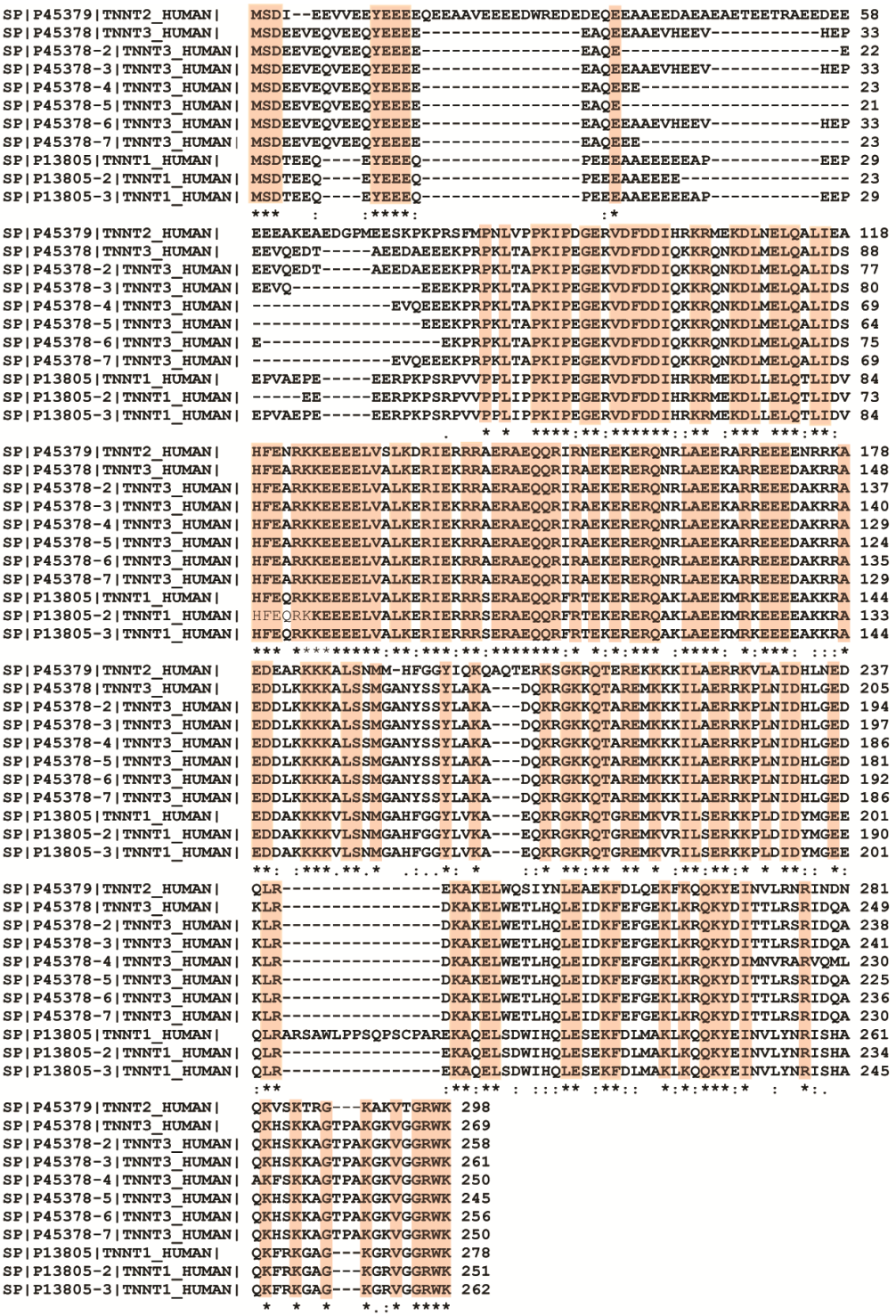
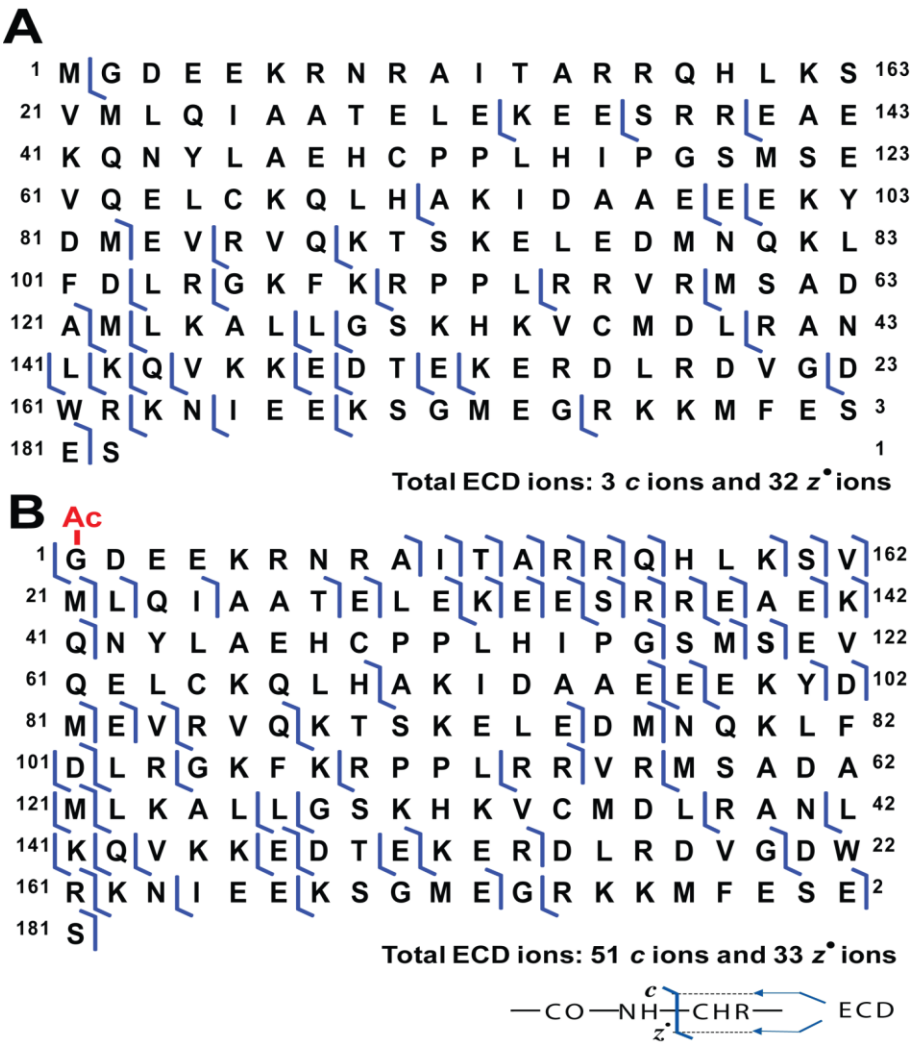


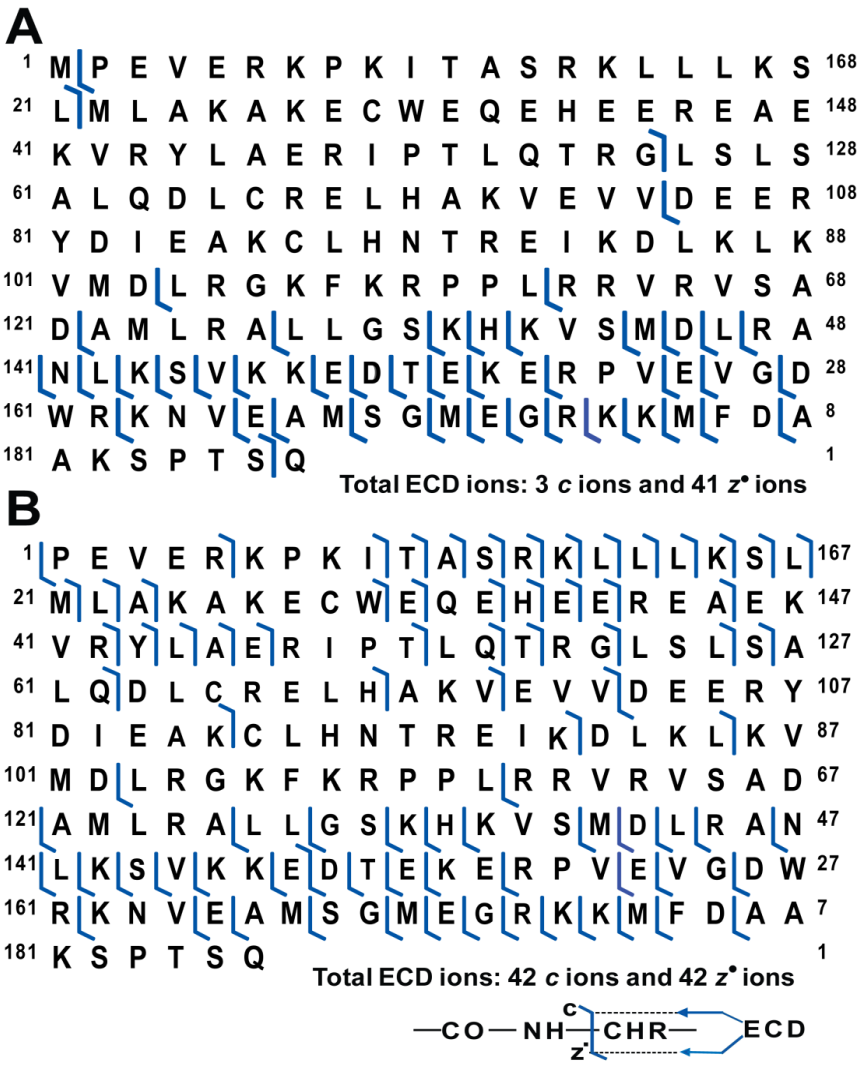
Supplementary Figure 1. Sequence alignment of human cTnT and all isoforms of human sTnT. All sequences listed above were retrieved from UniProtKB/Swiss-Prot database. The sequences are human cTnT, seven human fsTnT isoforms, and three ssTnT isoforms, respectively. Human cTnT, accession number P45379, also known as TNT, has been chosen as the "canonical"

sequence for cTnT. Isoform I of human fsTnT, P45378, also known as Tnt1, has been chosen as the “canonical” form for fsTnT; isoform II, P45378-2, also known as Tnt3; isoform III, P45378-3, also known as Tnt1f; isoform IV, P45378-4, also known as Tnt3f; isoform V, P45378-5, also known as Tnt3f*; isoform VI, P45378-6; isoform VII, P45378-7. Isoform I of human ssTnT, P13805, has been chosen as the “canonical” form for ssTnT; isoform II, P13805-2; isoform III, P13805-3. Shaded areas represent the conserved region between these human TnT isoforms.

Supplementary Figure 2. Sequence alignment of all human TnI isoforms including cTnI, fsTnI and ssTnI. All sequences listed above were retrieved from UniProtKB/Swiss-Prot database. The sequences are human cTnI, fsTnI, and ssTnI, respectively. Human cTnI, accession number P19429; human fsTnI, P48788; human ssTnI, P19237. Shaded areas represent the conserved region between these human TnI isoforms.



Supplementary Figure 3. The product map of fsTnI from one ECD spectrum. The assignments were made based on DNA-predicted sequence of human fsTnI (UnitprotKB/Swiss-Prot **P48788** (TNNI2_HUMAN)) before (A) and after (B) consideration the removal of methionine and acetylation (+42 Da) of the first amino acid at the N-terminus.



Supplementary Figure 4. The product map of ssTnI from one ECD spectrum. The assignments were made based on DNA-predicted sequence of human ssTnI (UnitprotKB/Swiss-Prot **P19237** (TNNI1_HUMAN)) before (A) and after (B) consideration of removal of methionine at the N-terminus.