(v) X_{65} is selected from the group consisting of A, C, D, E, F, G, H, I, K, L, M, N, Q, R, S, T, V, W, and Y;

(vi) X_{66} is selected from the group consisting of A, C, F, H, I, L, M, N, P, S, T, V, W, and Y;

(vii) X_{67} is selected from the group consisting of A, C, E, F, H, I, K, L, M, N, Q, R, S, T, V, W, and Y;

(viii) X_{68} is selected from the group consisting of A, C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, and Y;

(ix) X_{69} is selected from the group consisting of F, W, and Y; and

(x) X_{70} is selected from the group consisting of A, C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, and Y.

3. The polypeptide of any one of the preceding claims, wherein the BC loop comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 34, 7, 11-21, 23-31, and 36-38, the DE loop comprises an amino acid selected from the group consisting of SEQ ID NOs: 39 and 42, and the FG loop comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 75, 46, 50-62, 64-72, 76, 77, and 79.

~~4. The polypeptide of any one of the preceding claims, wherein the DE loop comprises an amino acid selected from the group consisting of SEQ ID NOs: 39 and 42.~~

~~5. The polypeptide of any one of the preceding claims, wherein the FG loop comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 75, 46, 50-62, 64-72, 76, 77, and 79.~~

4. The polypeptide of claim 1, wherein the BC, DE, and FG loops comprise:

(a) the amino acid sequences of SEQ ID NOs: 7, 39 and 46, respectively;

(b) the amino acid sequences of SEQ ID NOs: 8, 40 and 47, respectively;

(c) the amino acid sequences of SEQ ID NOs: 12, 42 and 51, respectively;

(d) the amino acid sequences of SEQ ID NOs: 17, 39 and 56, respectively;

(e) the amino acid sequences of SEQ ID NOs: 18, 39 and 57, respectively;

(f) the amino acid sequences of SEQ ID NOs: 17, 39 and 62, respectively;

(g) the amino acid sequences of SEQ ID NOs: 32, 44 and 73, respectively;

(h) the amino acid sequences of SEQ ID NOs: 33, 45 and 74, respectively;

(i) the amino acid sequences of SEQ ID NOs: 34, 39 and 75, respectively;

(j) the amino acid sequences of SEQ ID NOs: 35, 39 and 75, respectively; or

(k) the amino acid sequences of SEQ ID NOs: 38, 39 and 79.

~~6~~5. The polypeptide of any one of the preceding claims, wherein the BC loop comprises the amino acid sequence of SEQ ID NO: 34, the DE loop comprises SEQ ID NO: 39, and the FG loop comprises SEQ ID NO: 75.

~~7~~6. The polypeptide of any one of the preceding claims, wherein the polypeptide comprises an amino acid sequence at least 80%, 85%, 90%, 95%, 98%, 99% or 100% identical to the non-BC, DE, and FG loop regions of SEQ ID NOs: 331, 273, 281, or 118.

~~8~~7. The polypeptide of any one of the preceding claims, wherein the polypeptide comprises an amino acid sequence that is at least 80%, 85%, 90%, 95%, 98%, 99% identical to any one of SEQ ID NOs: 331, 273, 80-123, 228-239, 252-272, or 281.

~~9~~8. The polypeptide of any one of the preceding claims, wherein the polypeptides binds to a region within amino acids 56-66 of SEQ ID NO: 3.

~~10~~9. The polypeptide of claim ~~9~~8, wherein the polypeptide binds to a region within amino acids 85-101 and 56-66 of SEQ ID NO: 3.

~~11~~10. The polypeptide of any one of the preceding claims, wherein the polypeptide does not compete for binding to myostatin with ActRIIB and/or the polypeptide competes for binding to myostatin with ALK4 and/or ALK5.

~~12. The polypeptide of any one of the preceding claims, wherein the polypeptide competes for binding to myostatin with ALK4 and/or ALK5.~~

~~13~~11. The polypeptide of any one of the preceding claims, further comprising one or more pharmacokinetic (PK) moieties selected from the group consisting of polyethylene glycol, sialic acid, Fc, Fc fragment, transferrin, serum albumin, a serum albumin binding protein, and a serum immunoglobulin binding protein.

~~14~~12. A pharmaceutical composition comprising a polypeptide of any one of the preceding claims, and a carrier.

~~15~~13. An isolated nucleic acid molecule encoding the polypeptide of any one of claims 1-~~13~~11.

~~16~~14. A cell comprising a nucleic acid encoding the polypeptide of any one of claims 1-~~13~~11.

~~17~~15. ~~A method of attenuating or inhibiting a myostatin-related disease or disorder in a subject comprising administering~~ Use of an effective amount of the polypeptide or composition according to any one of claims 1-~~14~~12 in the manufacture of a medicament for attenuating or inhibiting a myostatin-related disease or disorder in a subject.

~~18~~16. The ~~method~~ use of claim ~~17~~15, wherein ~~administration of the polypeptide to the subject~~ the medicament results in at least one of the following biological effects:

(a) an increase in muscle mass;

(b) an increase in the number of muscle cells;

(c) an increase in the size of muscle cells; and

(d) an increase in muscle strength.

~~19~~17. The ~~method~~ use of claim ~~17~~15, wherein ~~administration of the polypeptide to the subject~~ the medicament results in at least one of the following biological effects:

(a) an increase in insulin sensitivity;

(b) an increase in glucose uptake by cells in the subject;

(c) a decrease in blood glucose levels; and

(d) a decrease in body fat.

~~20~~18. A method of detecting or measuring myostatin in a sample comprising contacting the sample with the polypeptide of any one of claims 1-~~13~~11, and detecting or measuring binding of the polypeptide to myostatin.

19. Use of a sufficient amount of the polypeptide of any one of claims 1-11, or the composition of claim 12 in the manufacture of a medicament for increasing muscle mass in a subject.

20. The use of claim 19, wherein the subject has a motor neuron disorder, neuromuscular disorder, or a neurological disorder.

21. The use of claim 20, wherein the subject has Duchenne's muscular dystrophy.

22. The method of claim 18 or the use of any one of claims 19-21, wherein the polypeptide comprises BC, DE, and FG loops comprising the amino acid sequences of SEQ ID NOs: 34, 39, and 75, respectively.

23. The method of claim 18 or the use of any one of claims 19-22, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 273.