CLAIMS

1. An isolated antibody that specifically binds pro/latent myostatin, comprising a heavy chain comprising an amino acid sequence of SEQ ID NO:50 and a light chain comprising an amino acid sequence of SEQ ID NO:51.

2. The isolated antibody of claim 1, wherein the antibody inhibits proteolytic formation of mature myostatin by tolloid protease.

3. The isolated antibody of claim 2, wherein the antibody inhibits proteolytic formation of mature myostatin by tolloid protease with an IC50 of less than 1 μM.

4. The isolated antibody of claim 1, wherein the antibody is cross-reactive with human pro/latent-myostatin and murine pro/latent-myostatin.

5. The isolated antibody of claim 1, wherein the antibody does not bind mature myostatin.

6. The isolated antibody of claim 1, wherein the antibody does not bind GDF11 or Activin A.

7. Use of an effective amount of the antibody of claim 1 in the manufacture of a medicament for the treatment of a myopathy, muscle atrophy, and/or metabolic disorder, wherein the medicament is to be administered to a subject having, or at risk of developing, the myopathy, muscle atrophy, and/or metabolic disorder.

8. The use of claim 7, wherein the medicament is to be administered in an amount effective to increase muscle mass, enhance force generation, and/or prevent muscle loss in the subject.

9. The use of claim 7, wherein the amount of the antibody is between about 0.3 and 30 mg/kg per dose.

10. The use of claim 7, wherein the medicament is to be administered intravenously or subcutaneously.

11. A pharmaceutical composition comprising an antibody having a heavy chain comprising an amino acid sequence of SEQ ID NO:50 and a light chain comprising an amino acid sequence of SEQ ID NO:51, and a pharmaceutically acceptable carrier, wherein the pharmaceutically acceptable carrier comprises histidine.

12. The antibody of claim 1 or the pharmaceutical composition of claim 11 for use in therapy.