CLAIMS

1. A compound, 5’-O-ketoleucyl-2’,3’-di-O-acetyluridine.

2. Use of the compound of claim 1 in the manufacture of a medicament for the treatment of a disorder characterized by diminished muscle strength or diminished muscle lean mass in a mammalian subject.

3. The use of claim 2, wherein the disorder is selected from the group consisting of muscle-wasting conditions; dynapenia; muscle disuse atrophy; and the muscle wasting and exercise tolerance associated with chronic kidney disease, chronic obstructive pulmonary disease, and chronic heart failure.

4. The use of claim 3 wherein the muscle-wasting condition is selected from the group consisting of sarcopenia and cachexia.

5. The use of any one of claims 2 to 4, wherein the subject is a human subject.

6. A pharmaceutical composition comprising therapeutically effective amounts of an orally bioavailable uridine prodrug and a ketoleucine compound.

7. The pharmaceutical composition of claim 6 wherein the uridine prodrug is uridine triacetate.

8. The pharmaceutical composition of claim 6, wherein the ketoleucine compound is selected from the group consisting of 5’-O-ketoleucyl-2’,3’-di-O-acetyluridine; keutoleucine and therapeutically effective salts thereof.

9. Use of the pharmaceutical composition of any one of claims 6 to 8 in the manufacture of a medicament for the treatment of a disorder characterized by diminished muscle strength or diminished muscle lean mass in a mammalian subject.

10. The use of claim 9, wherein the mammalian subject is a human subject.

11. The use of claim 9, wherein the disorder is selected from the group consisting of muscle-wasting conditions; dynapenia; muscle disuse atrophy; and the muscle wasting and exercise tolerance associated with chronic kidney disease, chronic obstructive pulmonary disease, and chronic heart failure..

12. The use of claim 11, wherein the muscle-wasting condition is selected from the group consisting of sarcopenia and cachexia.

13. The use of claim 11 or 12, wherein the mammalian subject is a human subject.