

CLAIMS

1. A molecule comprising migalastat bound to an α -galactosidase A protein comprising a HEK assay amenable mutation selected from the group consisting of A13T, A13P, N34D, N34T, G35V, M42K, E48Q, N53L, L54F, P60T, P60S, L89F, Y123C, H125L, I133M, K140T, F145S, P146R, D165G, L167V, L180W, K185E, R196G, V199G, Y200C, E203V, E203D, Y207H, M208R, I219L, Q221P, N224T, I242T, Q250R, Q250H, A257G, G261S, G261C, G271D, W277G, W277C, M284V, I303F, A307T, D322N, K326N, G334E, F337S, W349S, A352V, E358Q, E358D, G361E, G375E, G395E, T412N, and M421V.
2. The molecule of claim 1, wherein the mutation is selected from the group consisting of: A13T, A13P, N34D, N34T, and G35V.
3. The molecule of claim 1, wherein the mutation is selected from the group consisting of: M42K, E48Q, N53L, L54F, P60T, and P60S.
4. The molecule of claim 1, wherein the mutation is selected from the group consisting of: L89F, Y123C, H125L, and I133M.
5. The molecule of claim 1, wherein the mutation is selected from the group consisting of: K140T, F145S, P146R, D165G, L167V, L180W, and K185E.
6. The molecule of claim 1, wherein the mutation is selected from the group consisting of: R196G, V199G, Y200C, E203V, E203D, Y207H, and M208R.
7. The molecule of claim 1, wherein the mutation is selected from the group consisting of: I219L, Q221P, N224T, I242T, Q250R, and Q250H.
8. The molecule of claim 1, wherein the mutation is selected from the group consisting of: A257G, G261S, G261C, G271D, W277G, W277C, and M284V.
9. The molecule of claim 1, wherein the mutation is selected from the group consisting of: I303F and A307T.

10. The molecule of claim 1, wherein the mutation is selected from the group consisting of: D322N, K326N, G334E, F337S, W349S, and A352V.
11. The molecule of claim 1, wherein the mutation is selected from the group consisting of: E358Q, E358D, G361E, G375E, G395E, T412N, and M421V.
12. An α -galactosidase A protein having a HEK amenable mutation selected from the group consisting of A13T, A13P, N34D, N34T, G35V, M42K, E48Q, N53L, L54F, P60T, P60S, L89F, Y123C, H125L, I133M, K140T, F145S, P146R, D165G, L167V, L180W, K185E, R196G, V199G, Y200C, E203V, E203D, Y207H, M208R, I219L, Q221P, N224T, I242T, Q250R, Q250H, A257G, G261S, G261C, G271D, W277G, W277C, M284V, I303F, A307T, D322N, K326N, G334E, F337S, W349S, A352V, E358Q, E358D, G361E, G375E, G395E, T412N, and M421V, wherein the protein has increased stability as compared to a naturally-occurring α -galactosidase A protein having the same mutation.
13. The α -galactosidase A protein of claim 12, wherein the protein is bound to migalastat.
14. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: A13T, A13P, N34D, N34T, and G35V.
15. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: M42K, E48Q, N53L, L54F, P60T, and P60S.
16. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: L89F, Y123C, H125L, and I133M.
17. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: K140T, F145S, P146R, D165G, L167V, L180W, and K185E.
18. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: R196G, V199G, Y200C, E203V, E203D, Y207H, and M208R.

19. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: I219L, Q221P, N224T, I242T, Q250R, and Q250H.
20. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: A257G, G261S, G261C, G271D, W277G, W277C, and M284V.
21. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: I303F and A307T.
22. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: D322N, K326N, G334E, F337S, W349S, and A352V.
23. The α -galactosidase A protein of claim 12, wherein the mutation is selected from the group consisting of: E358Q, E358D, G361E, G375E, G395E, T412N, and M421V.