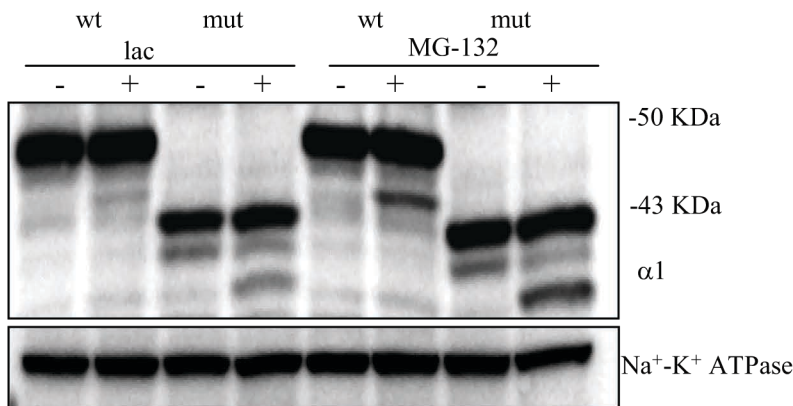
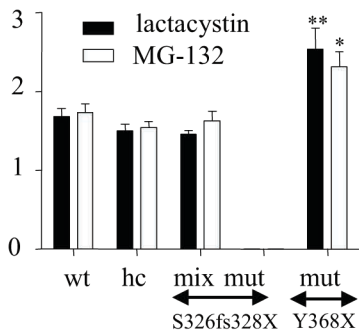


$\alpha 1(Y368X)\beta 2\gamma 2S$ 

Ratio of total $\alpha 1$ subunit IDVs after lac or MG-132 treatment vs IDVs before treatment (Calcium transfection)

B



Supplementary Figure 3. The mutant $\alpha 1(Y368X)$ protein, the NMD-insensitive $\alpha 1$ minigene subunit protein was increased with proteasome inhibition.

(A) HEK 293T cells were cotransfected with $\beta 2$ and $\gamma 2S$ subunit cDNAs and wild-type $\alpha 1$ subunit minigene (ratio of 1:1:1, (wt) or mut $\alpha 1(Y368X)$ subunit minigene (ratio of 1:1:1 (mut). The cells were incubated with or without lactacystin (10 μM) (left) or MG-132 (3 μM) (right) for 6 hr before harvest. The total cell lysates (15 μg /lane) were analyzed by 10% SDS-PAGE. With proteasomal inhibition, there was an increase in the $\alpha 1(Y368X)$ subunit main band (43 KDa) and appearance of a third band that was likely an unglycosylated form of the mutant band or a degraded fragment. (B) The histogram displays the ratio of increase of protein with lactacystin or MG-132 treatment over the protein without treatment. The treatment with either lactacystin or MG-132 increased the total wild-type $\alpha 1$ subunit expression in wt, hc and mixed conditions and mutant $\alpha 1(Y368X)$ subunit protein expressions. There was no mutant $\alpha 1(S326fs328X)$ protein detected by Western blot either before or after lactacystin or MG-132 treatments (* $p < 0.05$, ** $p < 0.01$ vs wild-type $n = 4$).