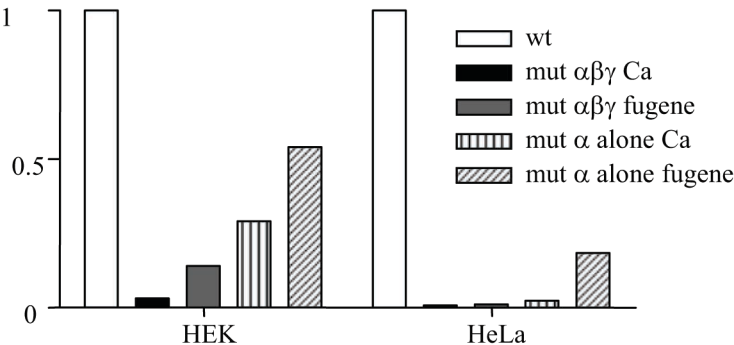


Ratio of total  $\alpha 1(S326fs328X)$  to total  $\alpha 1$  subunits



**Supplementary Figure 1. Quantification of the mutant human  $\alpha 1(S326fs328X)$  subunit protein.**

We used the more quantitative technique of flow cytometry to measure the relative expression of total mutant  $\alpha 1(S326fs328X)$  subunit protein vs wild-type  $\alpha 1$  subunit protein in HEK and HeLa cells under different conditions. Expression of total wild-type subunit protein was arbitrarily taken as 1, and mutant was normalized to wild-type subunit protein each time ( $n = 1-5$ ). In all conditions, wt stands for wild-type, mut  $\alpha\beta\gamma$  Ca or mut  $\alpha\beta\gamma$  fugene stands for the total mutant protein when expressed with  $\beta 2$  and  $\gamma 2S$  subunits by calcium phosphate precipitation (mut  $\alpha\beta\gamma$  Ca) or by Fugene (mut  $\alpha\beta\gamma$  fugene) transfection. Total mutant protein was expressed with  $\alpha 1$  subunit alone by calcium phosphate precipitation (mut  $\alpha 1$  alone Ca) or by Fugene transfection (mut  $\alpha 1$  alone fugene).