Supplemental Table 1. Genetics of the RAB27A-deficient patients used for lentiviral transduction

Patient	Gender	*RAB27A* variants	Diagnosis
1	M	Hmz c.514-518delCAAGC; p.Gln172NfsX2	GS2
2	F	Hmz c.514-518delCAAGC; p.Gln172NfsX2	GS2
3	M	Hmz c.148-149delAGinsC; p.Arg50GlnfsX35	GS2
4	F	Hmz c.514-518delCAAGC, p.Gln171NfsX2	GS2

FIGURE LEGENDS

Sup. Fig. 1. Flow cytometry gating strategy for transduced CD8+ T cells. CD8+ T cells from GS2 patients as well as healthy controls were isolated, transduced with lentiviruses encoding mCherry-tagged RAB27A constructs and then stimulated for evaluation of T cell receptor triggered degranulation. (**A**) Plots show the gating strategy for CD8+ T cells from one representative patient. Plots to the right depict the transduction efficiency as revealed by mCherry expression for the RAB27A WT and p.R184Q constructs. (**B**) Plots show gating of CD8+ T cells from GS2 patients based on mCherry expression (left column) and CD107a surface expression following anti-CD3 stimulation (right column) of cells transduced with RAB27A WT and p.R184Q constructs, respectively, from one representative GS2 patient. (**C**) Quantification of the frequency of mCherry+ (high expression) CD8+ T cells following lentiviral transduction of cells from four GS2 patients with different RAB27A constructs, as indicated. (**D**) Quantification of the MFI of mCherry+ (high expression) CD8+ T cells following lentiviral transduction of cells from four GS2 patients with different RAB27A constructs, as indicated.