

SUPPLEMENTARY MATERIAL

Figure S1. Cartoon showing the substitutions performed in the α_{1B} -

AR.

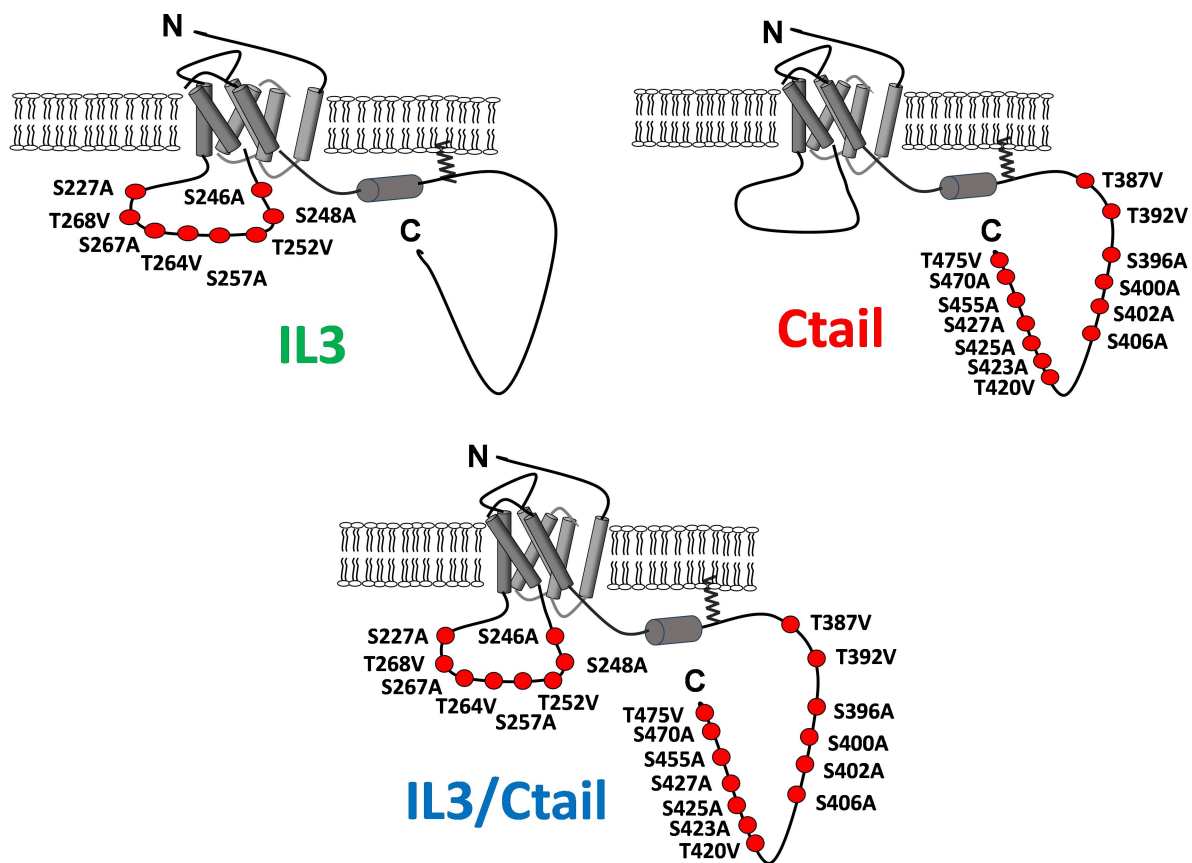


Figure S2 Representative autoradiograph of the phosphorylation of the WT and mutant α_{1B} -ARs run in parallel.

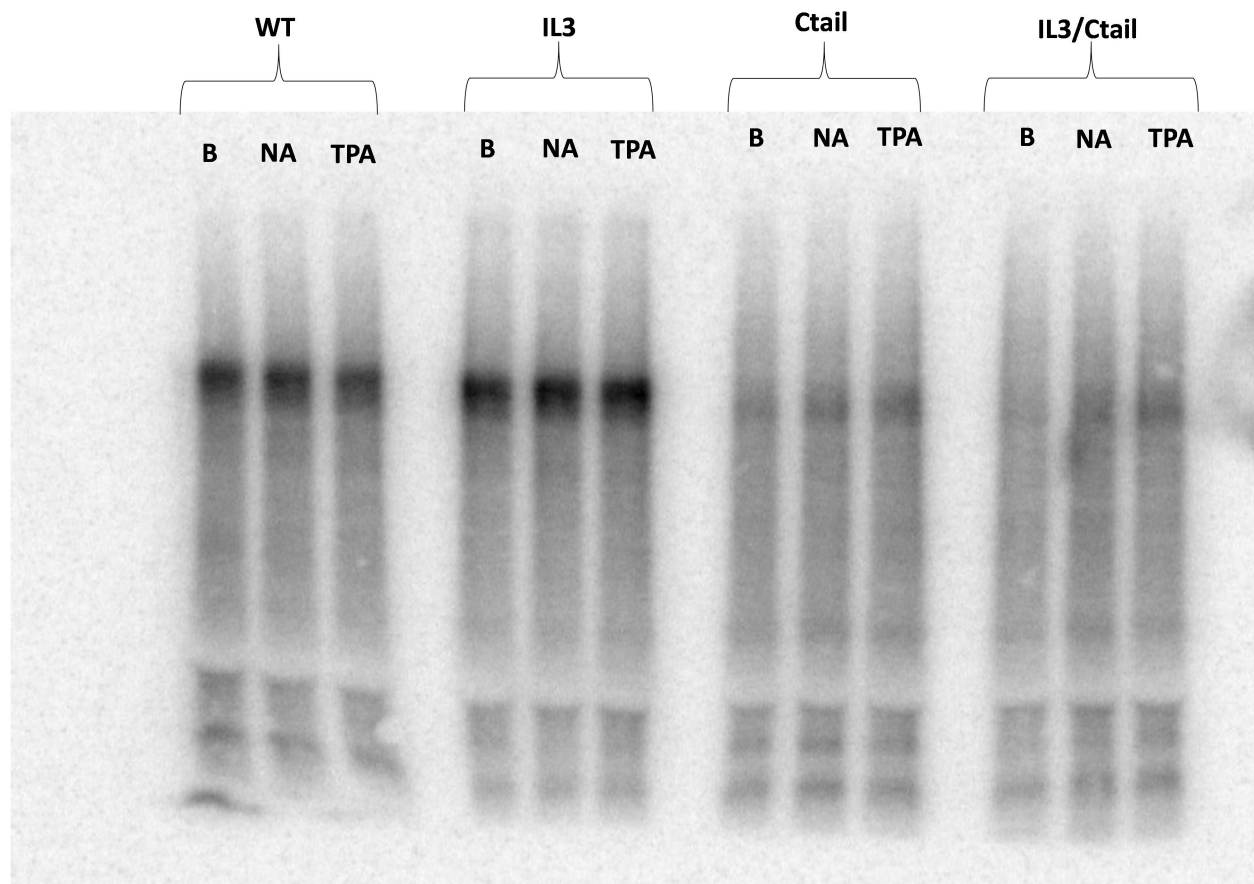


Figure S3. Representative intracellular calcium tracings of cells expressing the WT and mutant α_{1B} -ARs pre-incubated without any agent or for 5 or 10 min with 10 μ M NA. Cells were washed and rechallenge with 10 μ M NA (homologous desensitization) and subsequently with 1 μ M LPA.

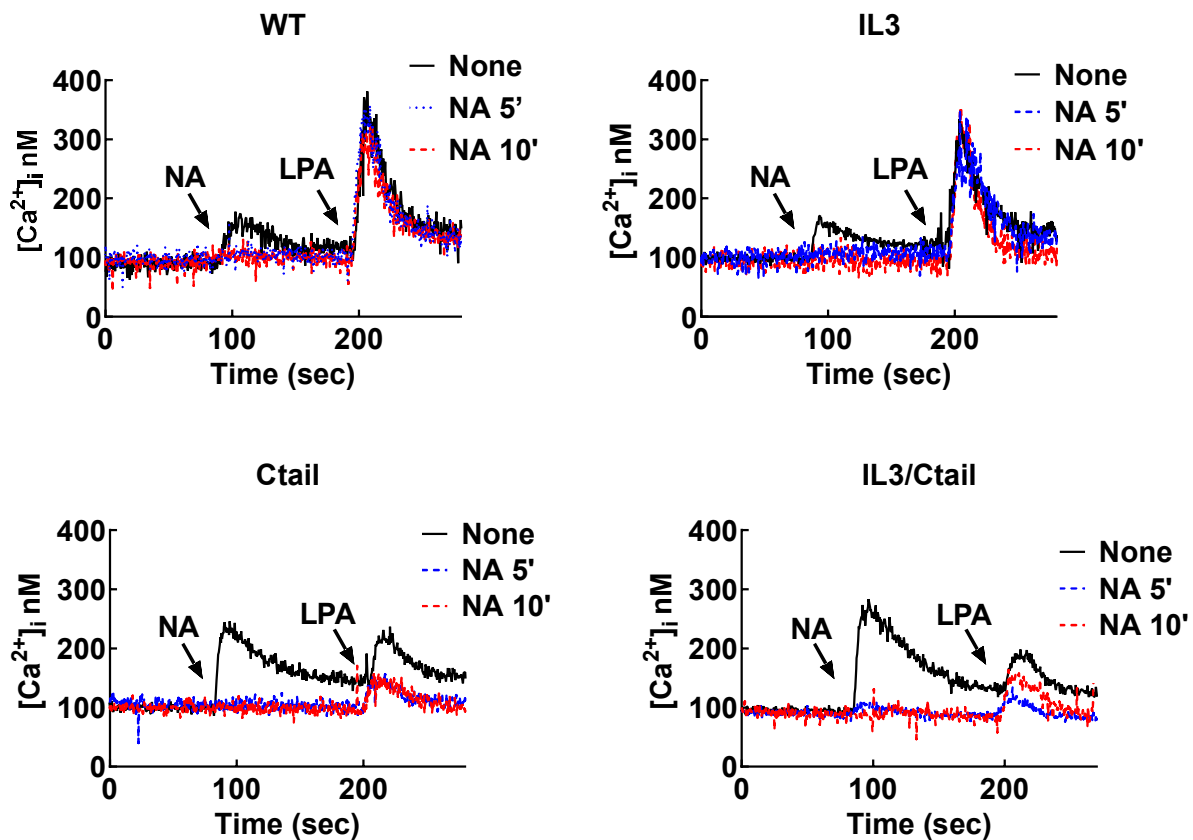


Figure S4. Representative intracellular calcium tracings of cells expressing the WT and mutant α_{1B} -ARs. Cells were pre-incubated without any agent or for 5 or 10 min with 1 μ M PMA (heterologous desensitization) and subsequently challenged with 10 μ M NA.

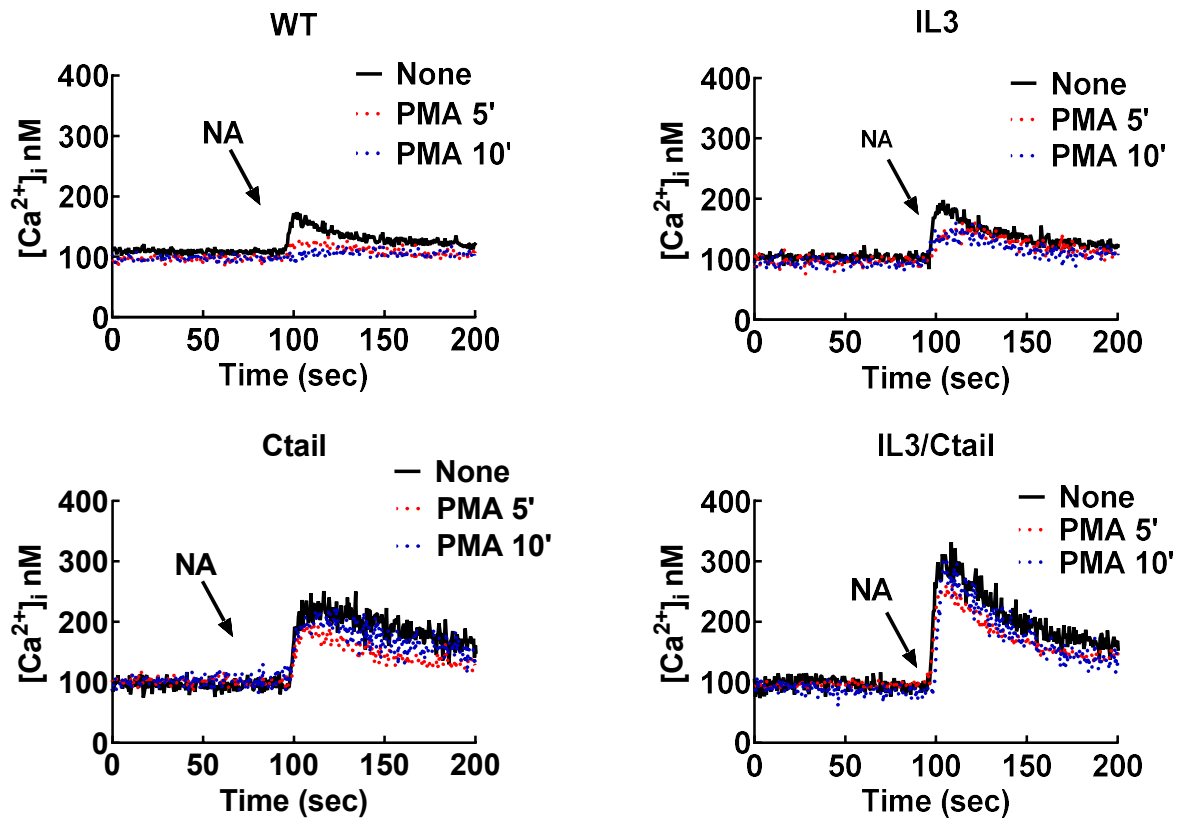


Figure S5. NA-induced ERK phosphorylation (5 and 60 min) in cells expressing the WT α_{1B} -AR, the IL3, the Ctail, or the IL3/ Ctail mutants. The means are plotted, and error bars indicate the S.E.M. of 5 experiments performed on different days using different cell cultures. *** $p < 0.001$ and ** $p < 0.05$ vs. cells expressing other receptors, same time of incubation. Representative Western blots are shown above the graph.

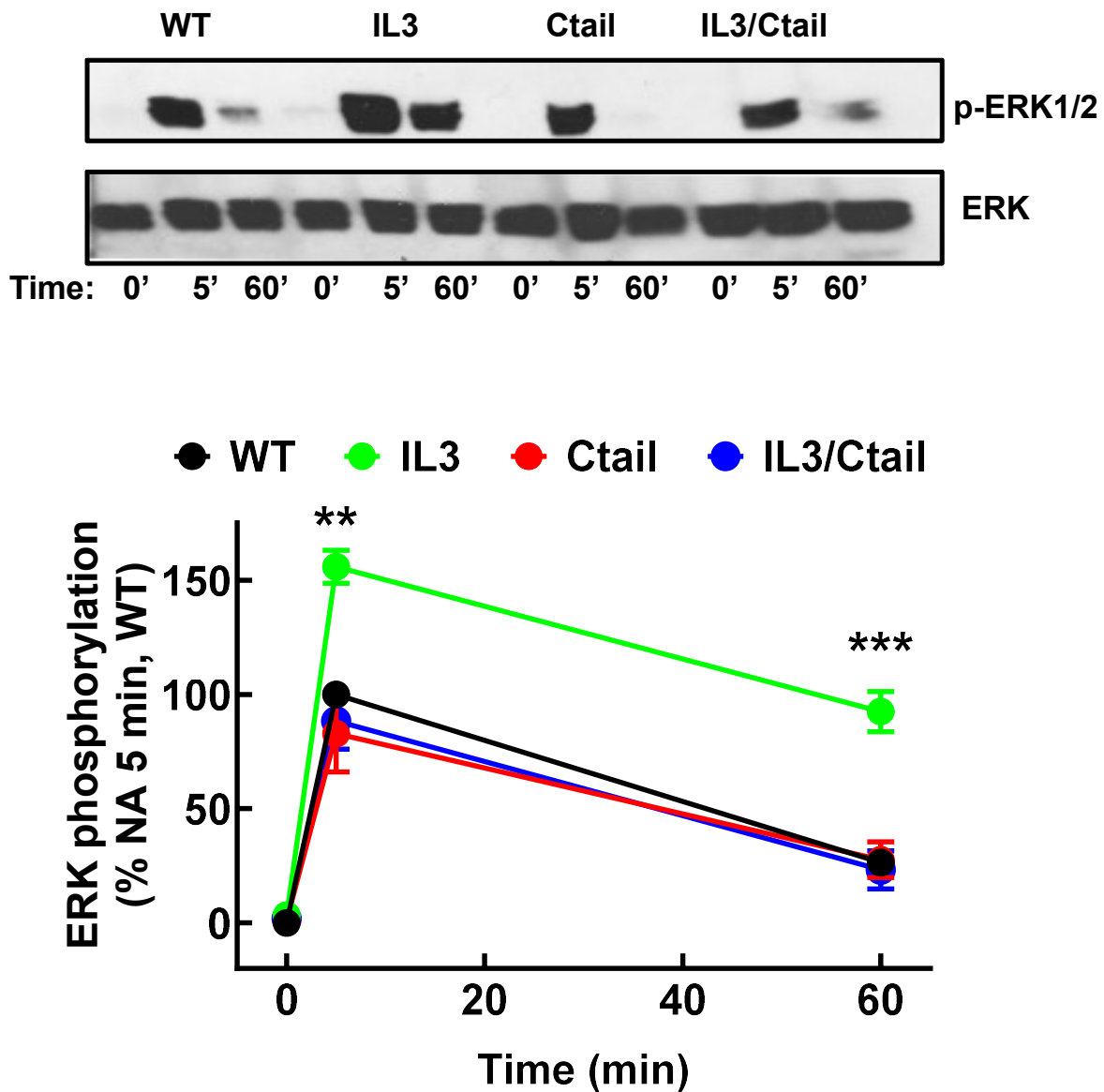


Figure S6. PMA-induced ERK phosphorylation (5 and 60 min) in cells expressing the WT α_{1B} -AR, the IL3, the Ctail, or the IL3/ Ctail mutants. The means are plotted, and error bars indicate the S.E.M. of 5 experiments performed on different days using different cell cultures. *** $p < 0.001$ vs. IL3- or Ctail-expressing cells, same time; ** $p < 0.05$ vs. cells expressing other receptor constructs, same time. Representative Western blots are shown above the graph.

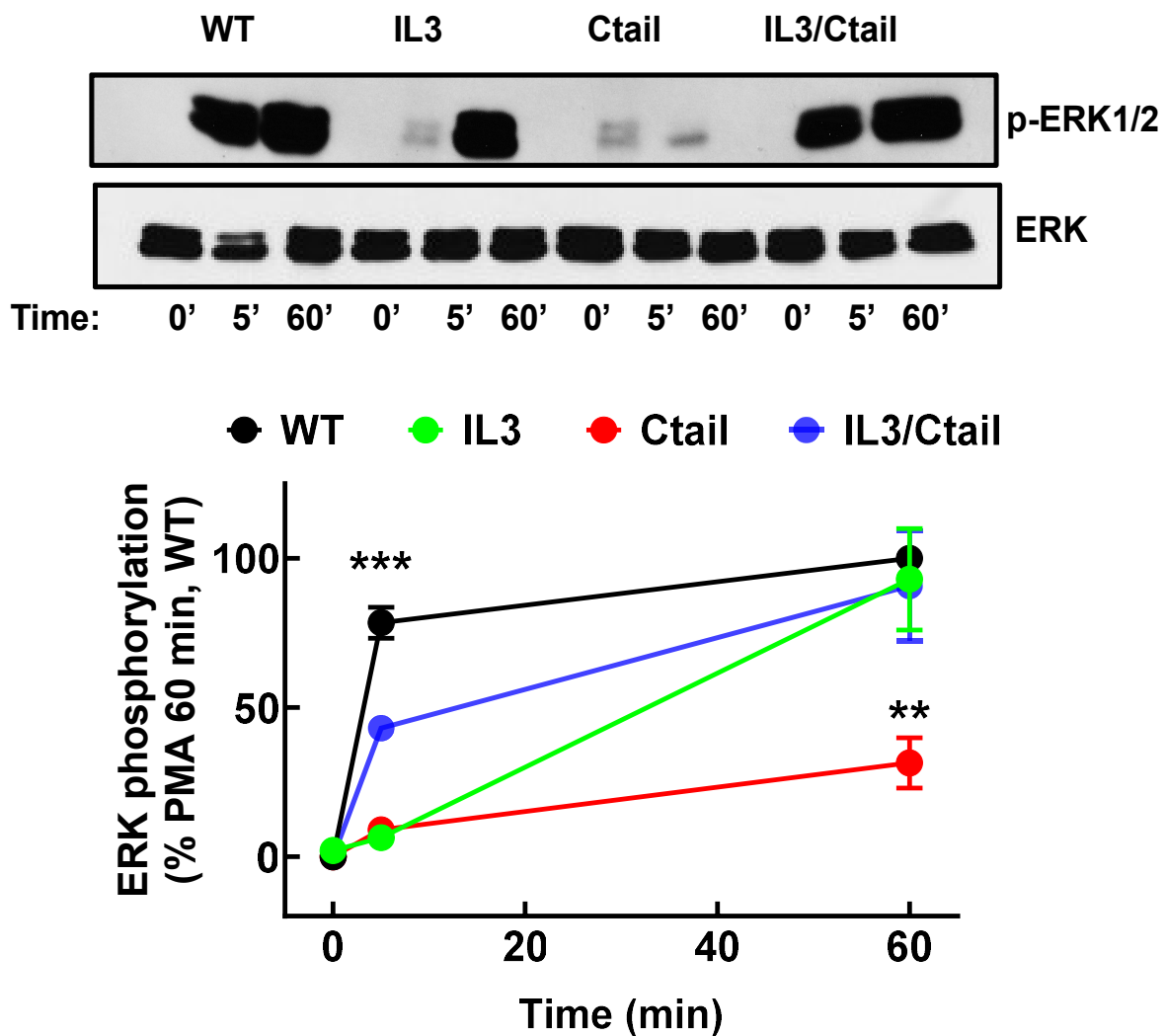


Table S1

Qualitative assessment of the functional repercussion of the distinct α_{1B} -AR mutations on the parameters studied as compared to the wild-type.

Parameter	IL3	Ctail	IL3/ Ctail
Baseline Receptor Phosphorylation	=	↓↓	↓↓/↓↓↓
NA- and PMA-induced Receptor Phosphorylation	=	↓↓	↓↓↓
NA action on [Ca²⁺] i	EC ₅₀ ↓ Max =	EC ₅₀ ↓ Max =	EC ₅₀ ↓↓ Max ↑↑
[Ca²⁺] i Desensibilization	NA = PMA ↓	NA = PMA ↓↓↓	NA = PMA ↓↓↓
Receptor internalization	NA ↓ PMA ↓	NA ↓↓↓ PMA ↓↓↓	NA ↓↓↓ PMA ↓↓↓
ERK 1/2 phosphorylation	NA ↑↑ PMA ↓ delayed	NA = PMA ↓↓	NA = PMA ↓ delayed