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(54) Title: EXPRESSION OF FOXP3 IN EDITED CD34$^+$ CELLS

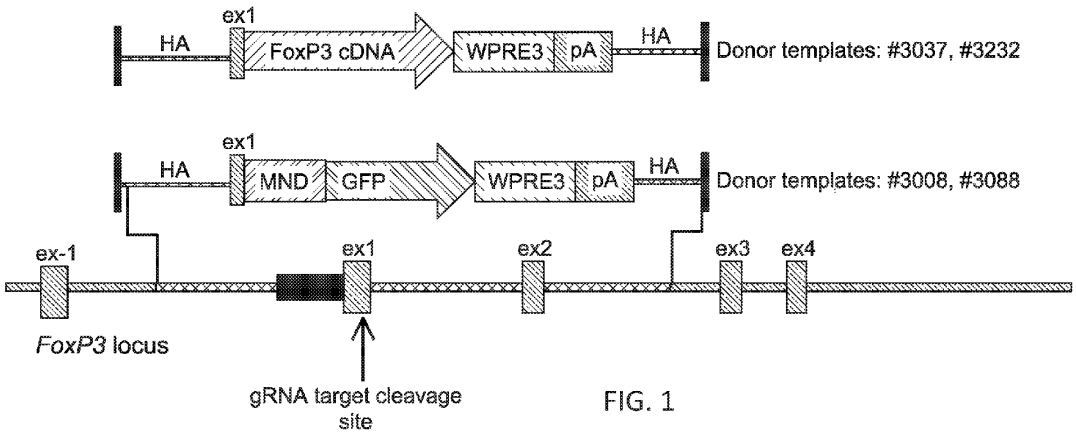


FIG. 1

(57) Abstract: Aspects of the invention described herein concern the incorporation of a FOXP3 cDNA (e.g., full-length human codon-optimized cDNA) into a *FOXP3* gene or a non-*FOXP3* locus so as to provide constitutive or regulated FOXP3 expression in a primary human CD34$^+$ cells or cells derived from edited CD34$^+$ cells. In some embodiments, guide RNA sequences that are directed to FOXP3, AAVS1, or other candidate loci are used for CRISPR/Cas9-mediated gene regulation, and gene delivery cassettes for HDR based gene-modification are provided.

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