

Figure 1. Diagram of some embodiments of method of engineering a cell for antigen presentation to T cells.

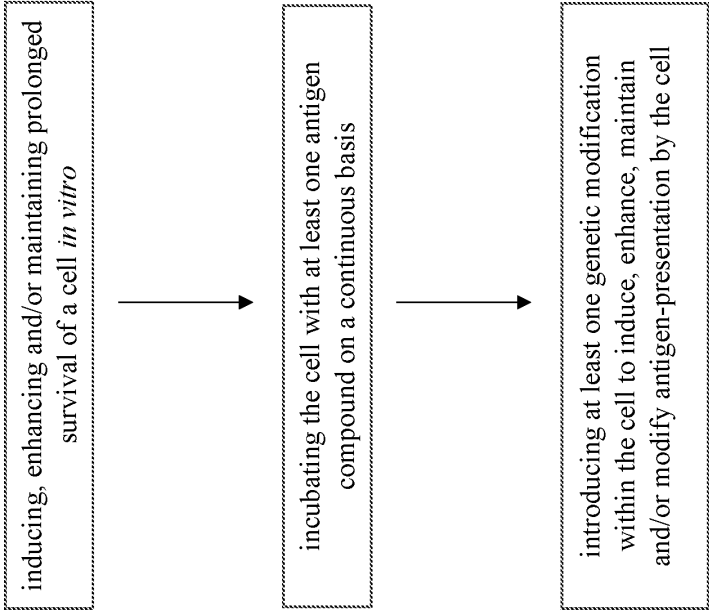


FIG. 1

Figure 2. An engineered cell may include one or more of the following features.

- a) has been adjusted to induce, enhance and/or maintain its survival in vitro;
- b) has been incubated with at least one antigen compound; and
- c) has at least one genetic modification to induce, enhance, maintain or modify antigen-presentation by the cell.

FIG. 2

Figure 3. Some elements of a primary human B cell to present antigen to T cells.

- a) a nucleotide sequence providing stable expression of BCL-6 and BCL-XL;
- b) a nucleotide sequence providing stable expression of between one and forty polypeptides, each polypeptide encoding at least nine amino acids, and each polypeptide being an antigen; and
- c) a nucleotide sequence providing stable expression of CD40L.

FIG. 3

Figure 4. Steps that may be included in a method of antigen presentation.

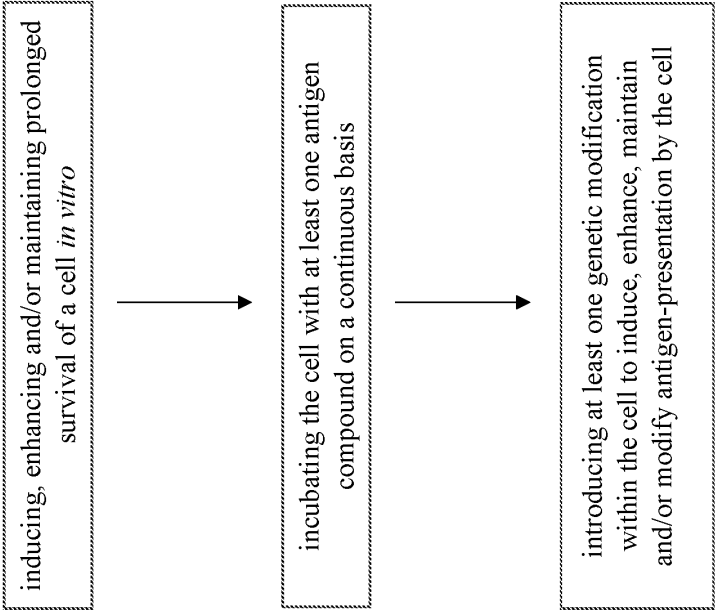


FIG. 4

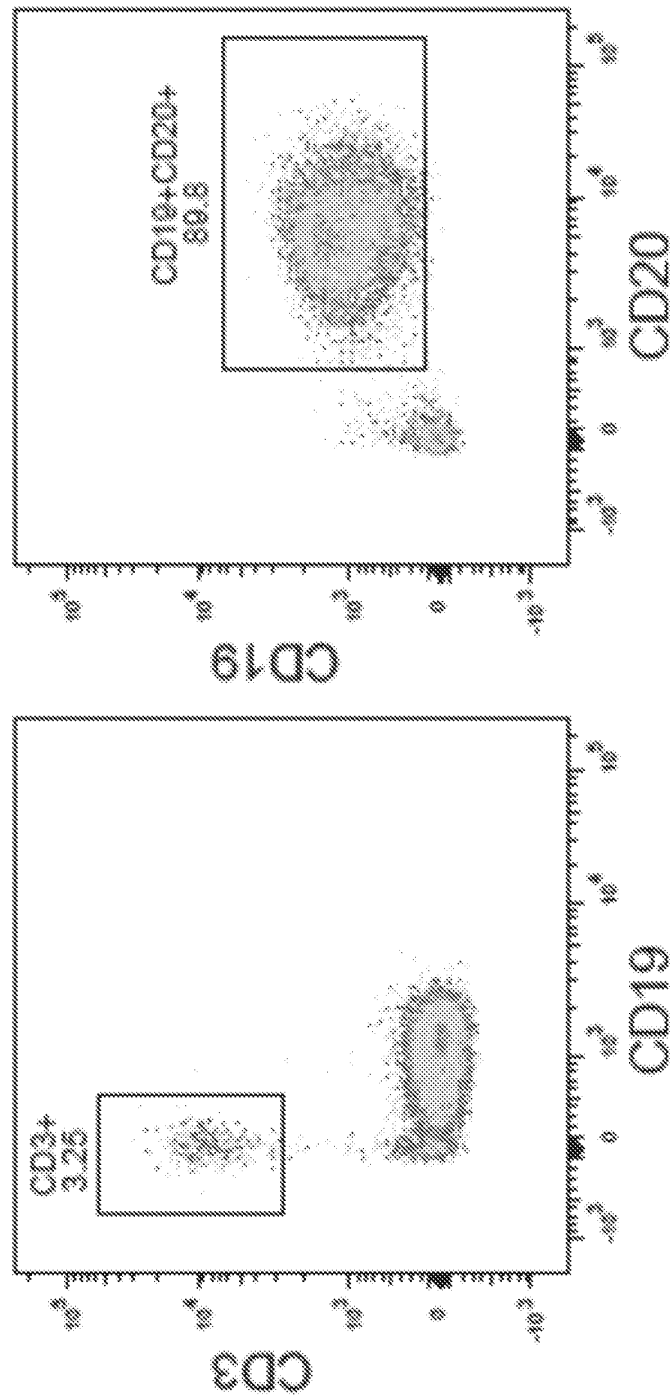


FIG. 5A

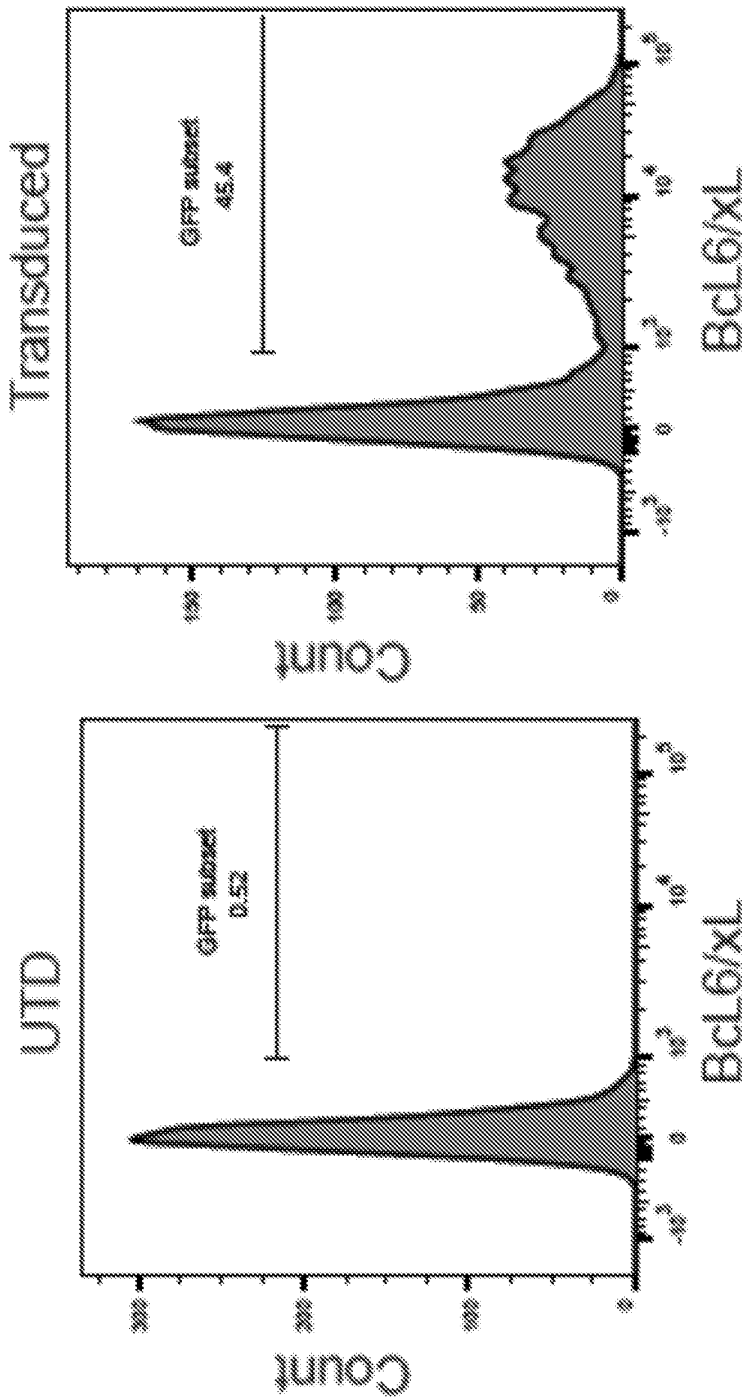


FIG. 5B

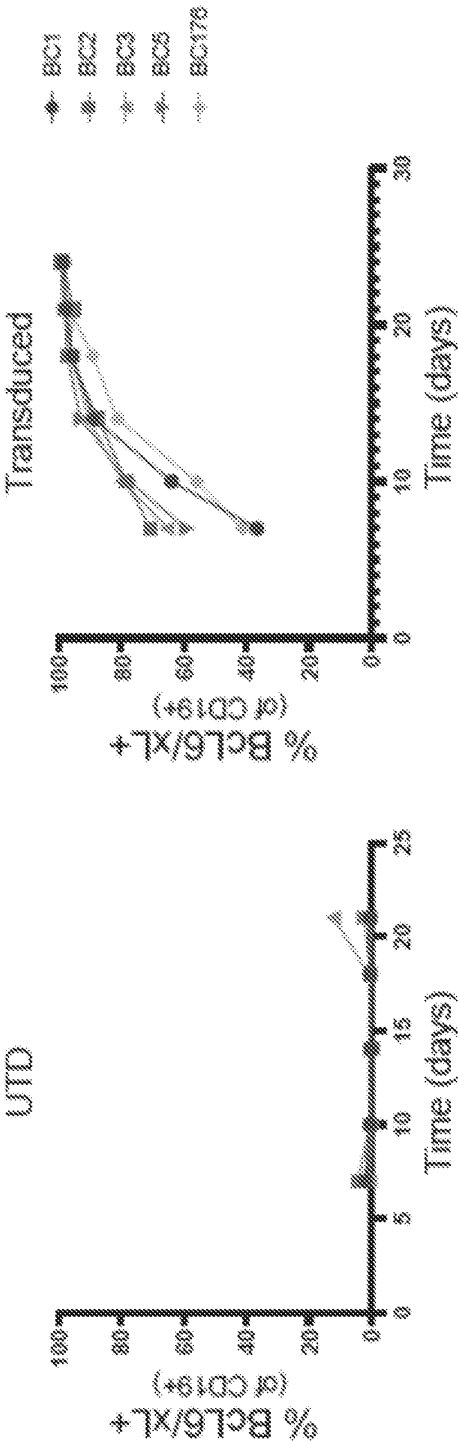


FIG. 5C

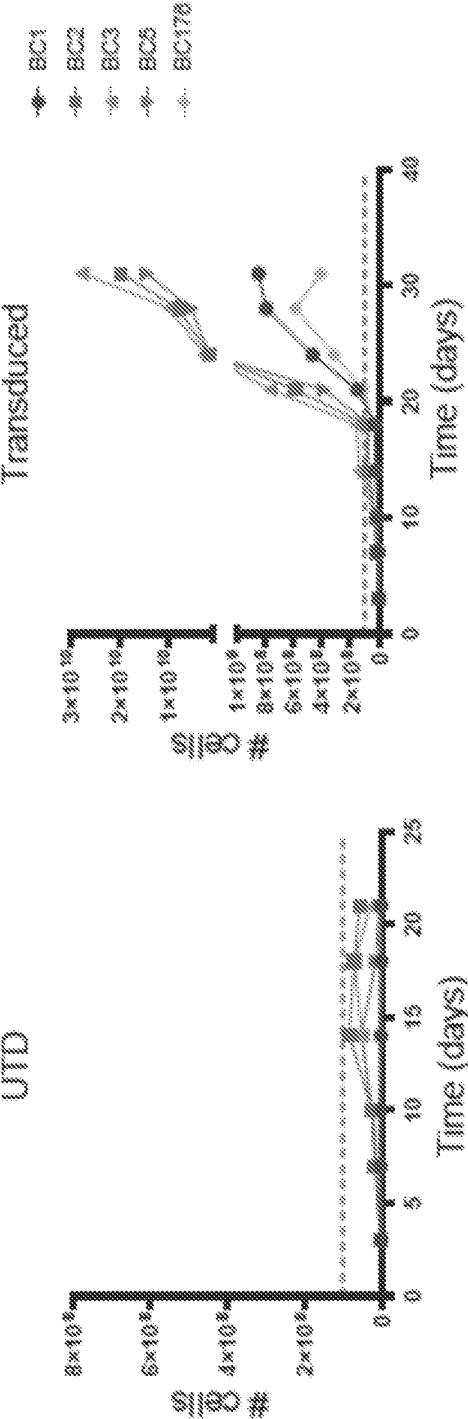


FIG. 5D

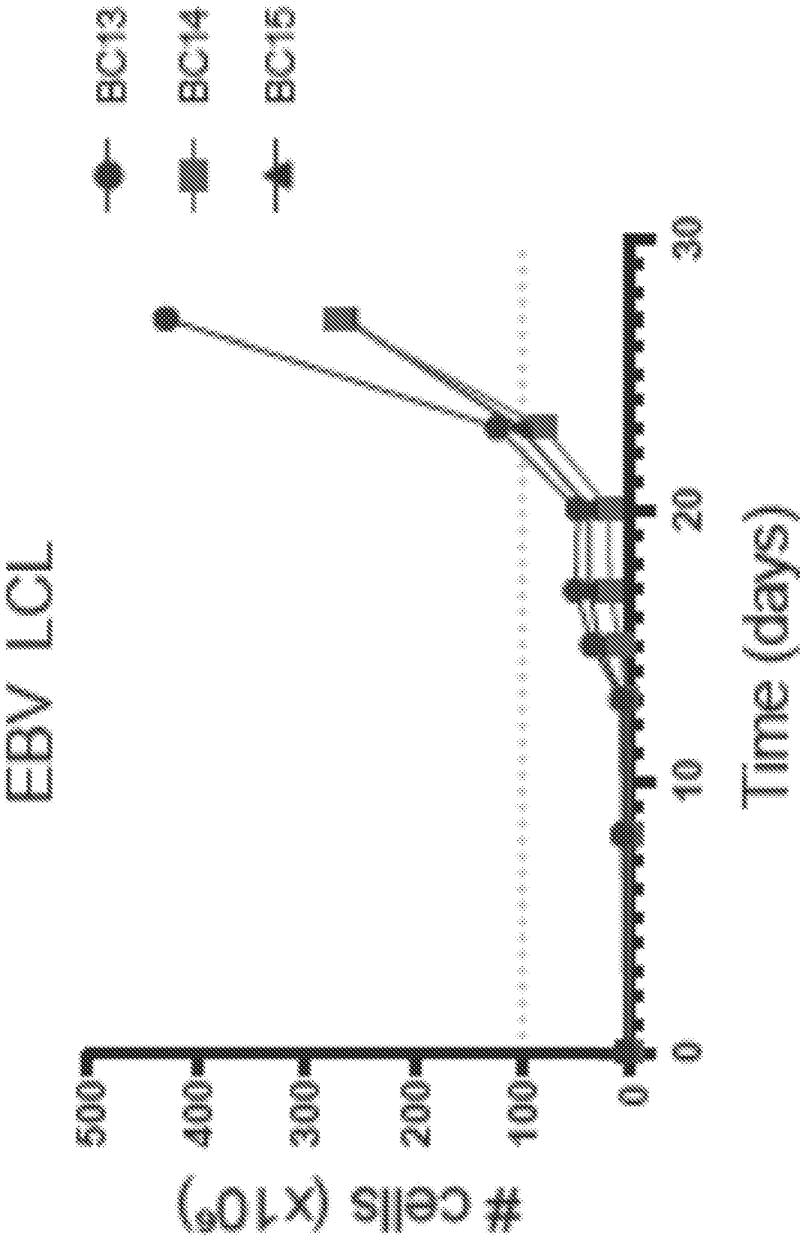


FIG. 5E

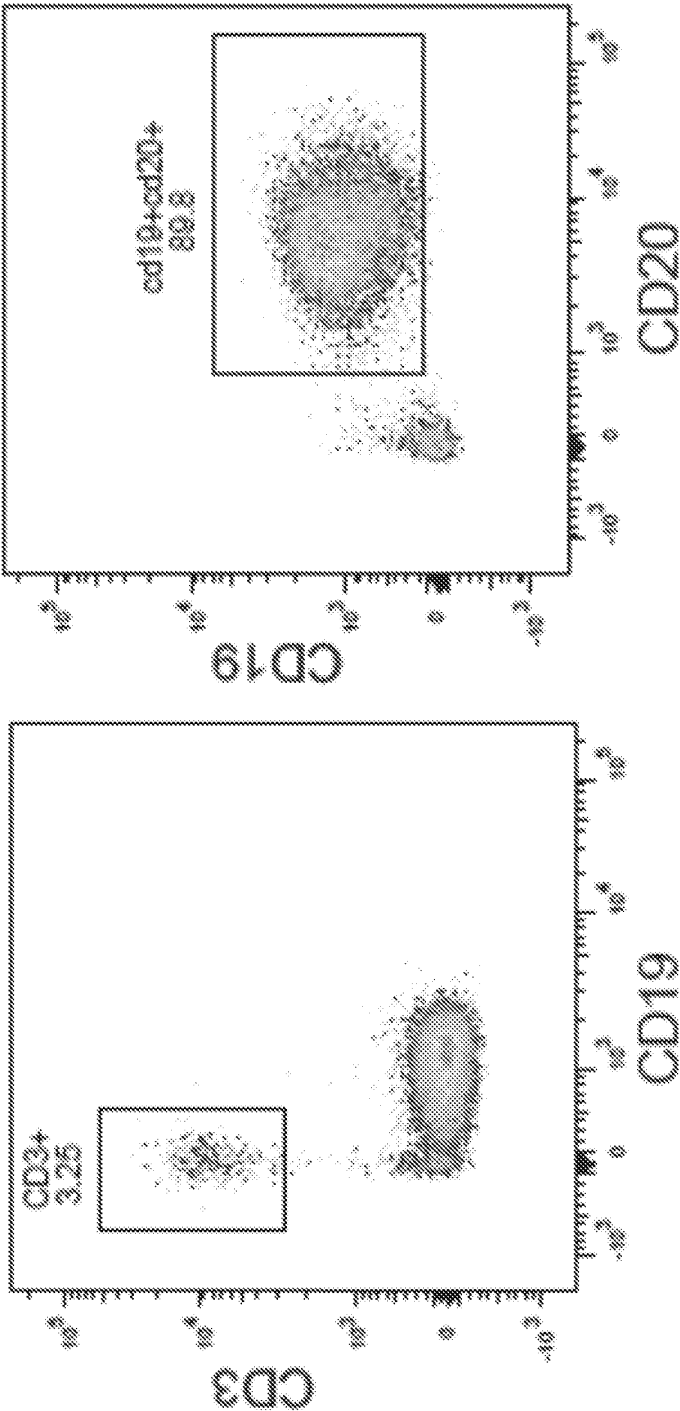


FIG. 6A

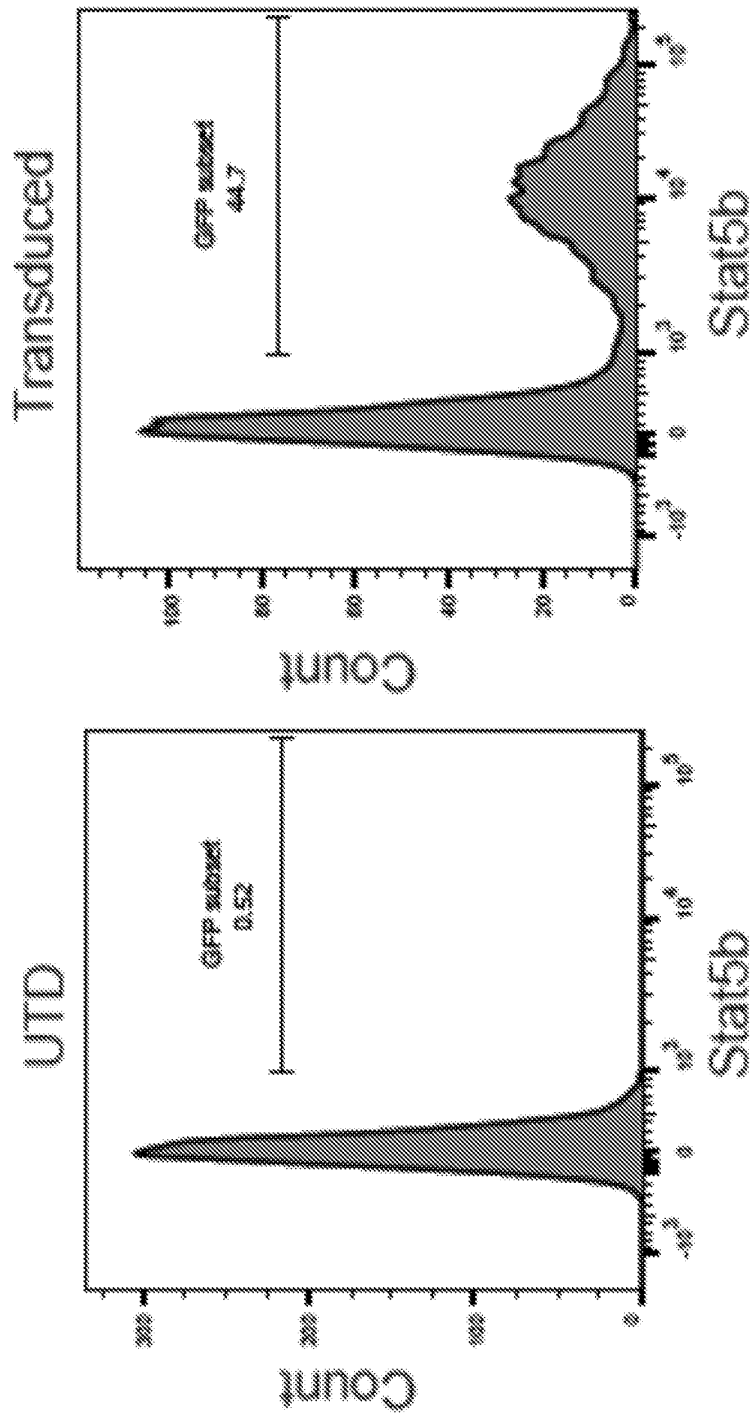


FIG. 6B

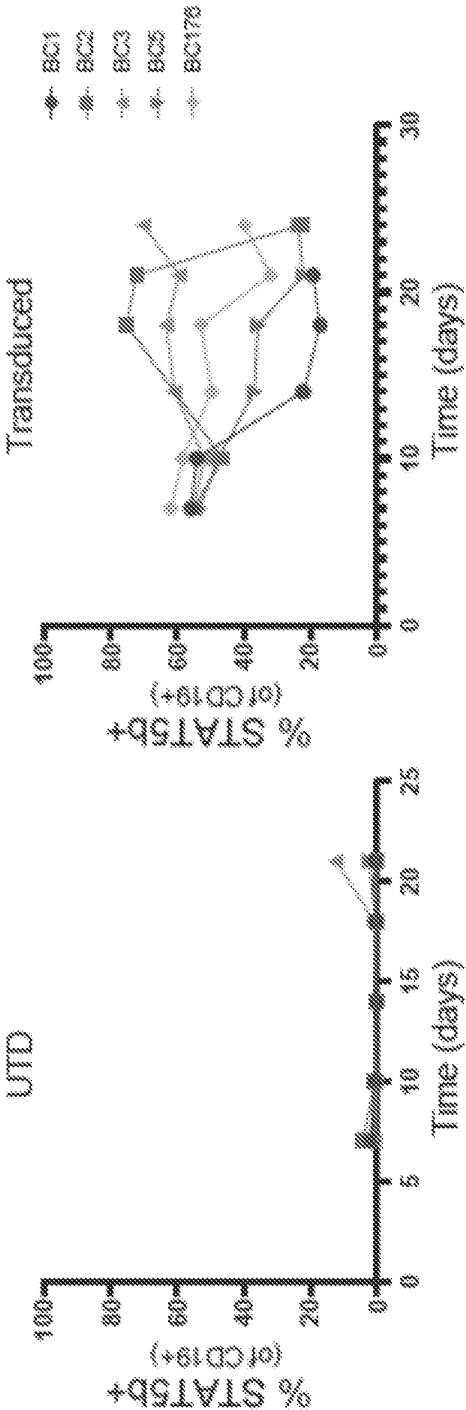


FIG. 6C

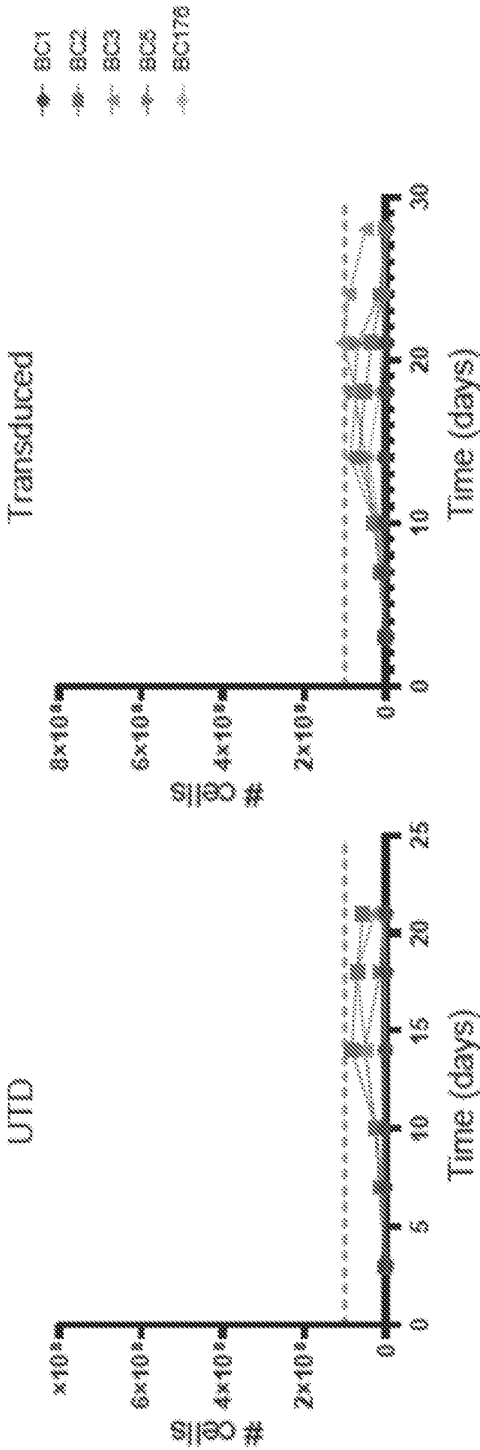


FIG. 6D

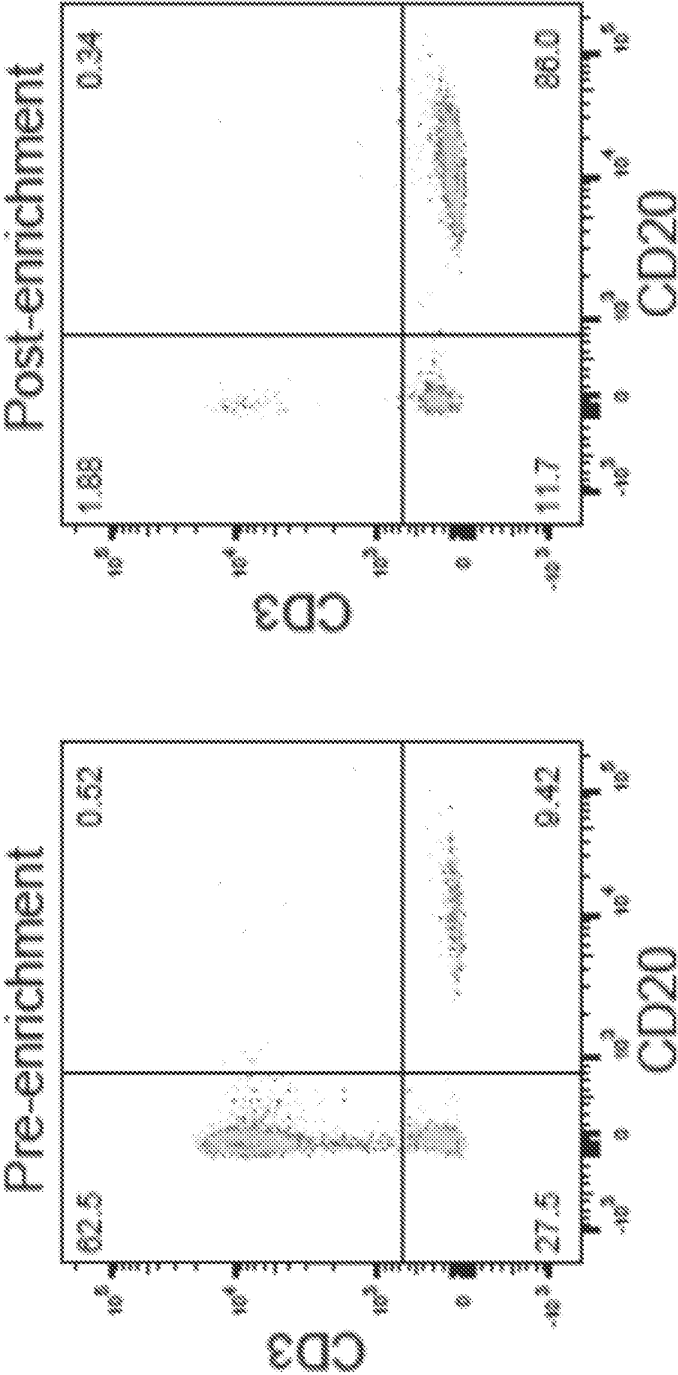


FIG. 7A

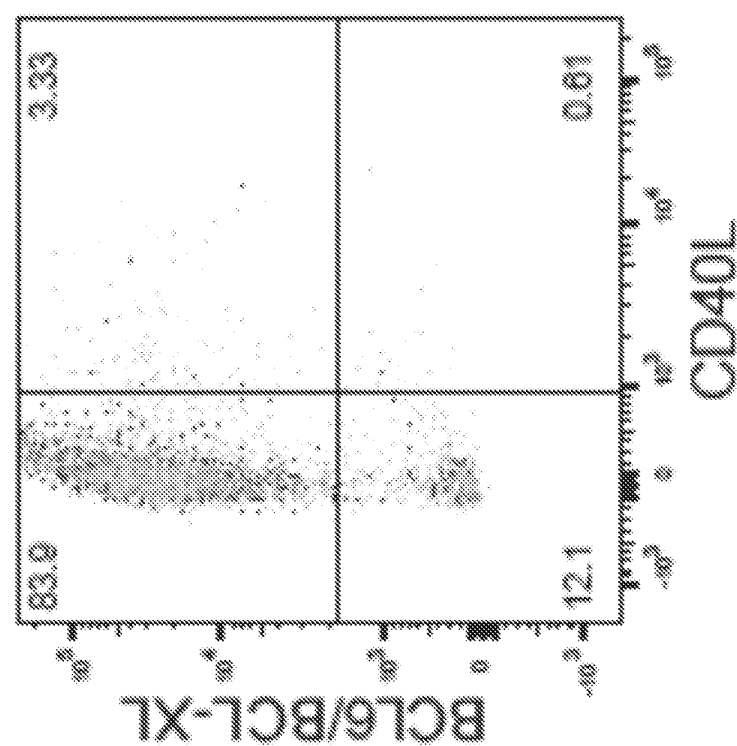


FIG. 7B

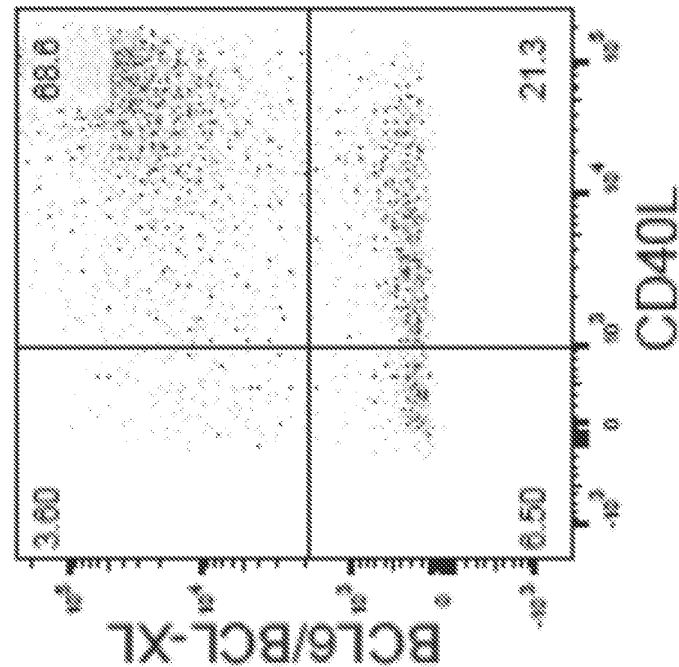


FIG. 7C

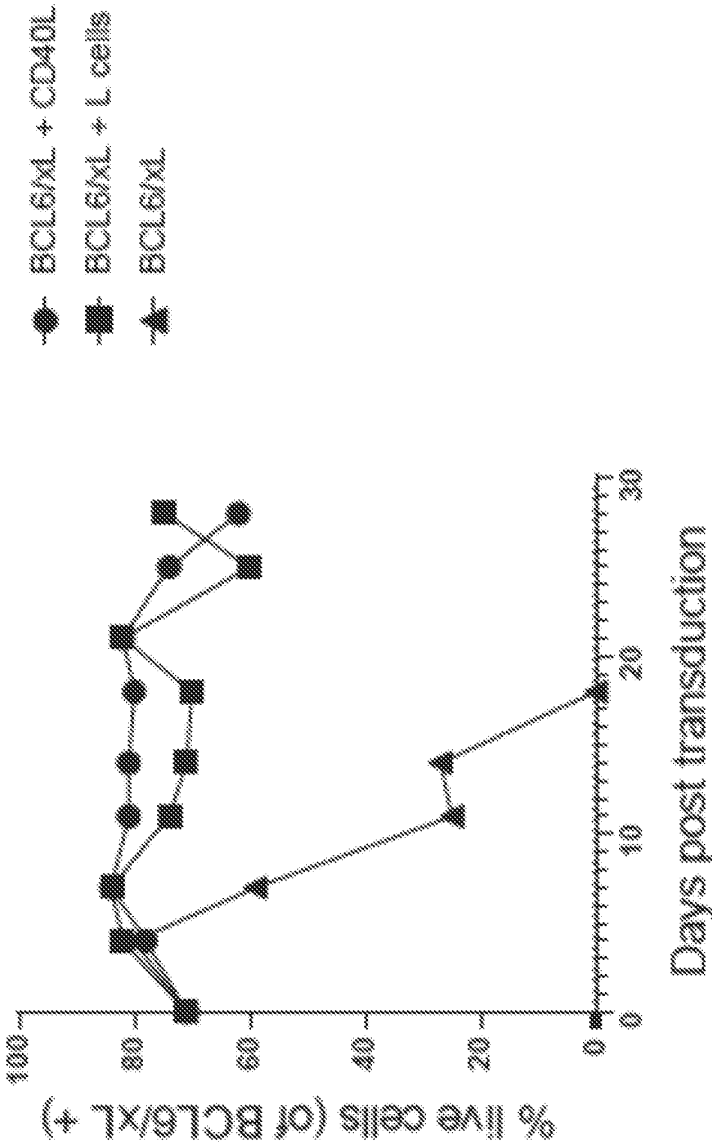


FIG. 7D

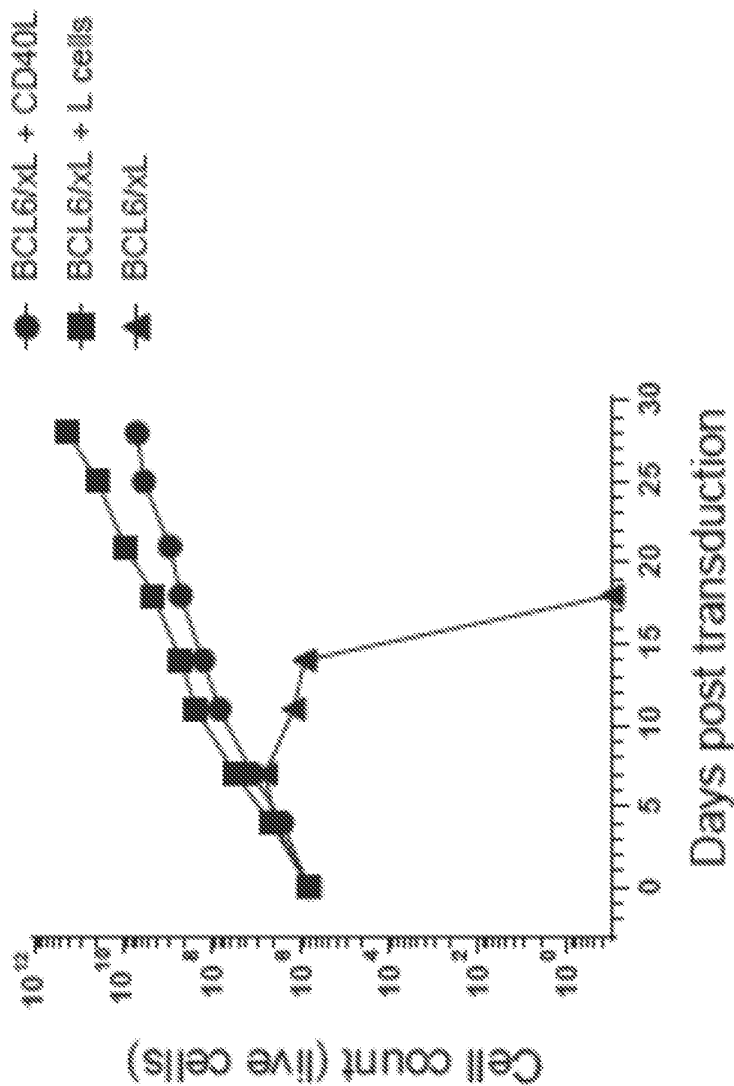


FIG. 7E

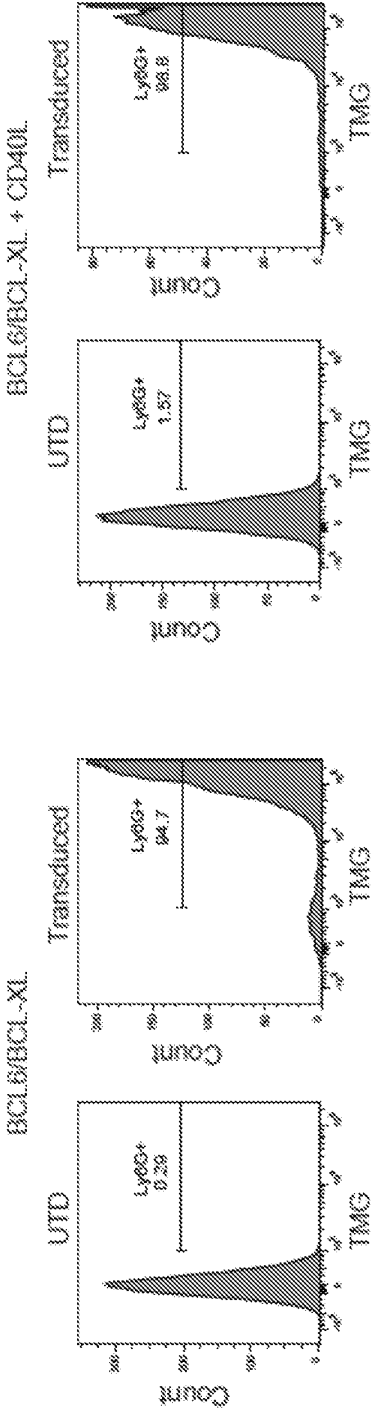


FIG. 7F

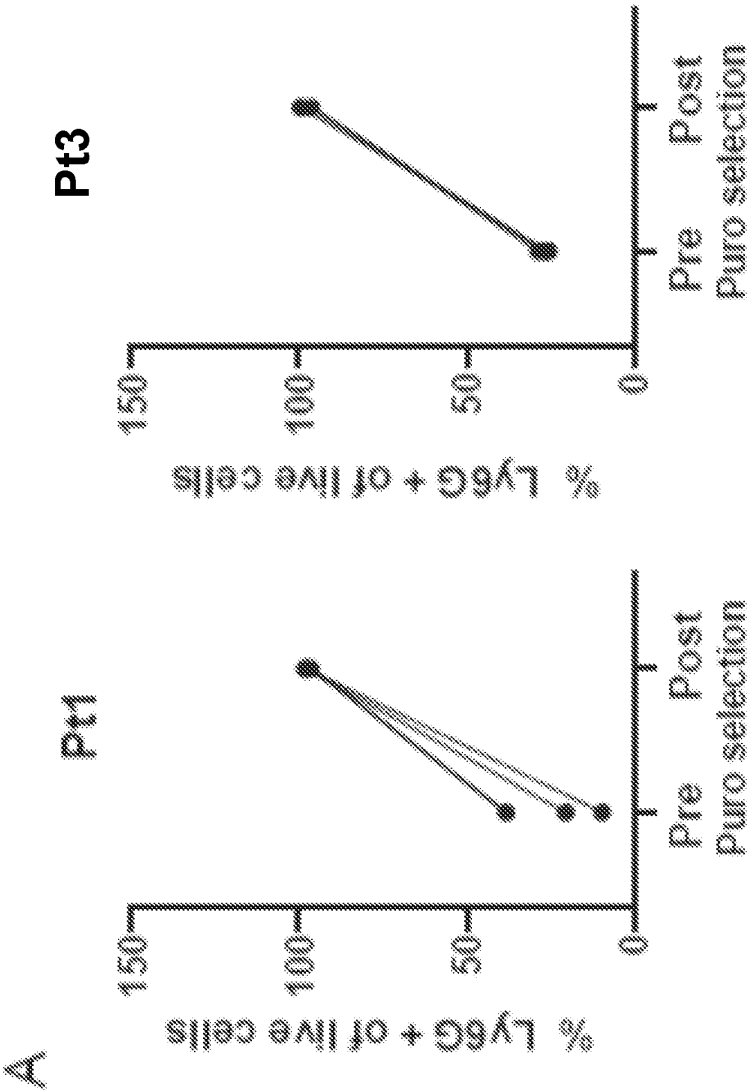


FIG. 8A

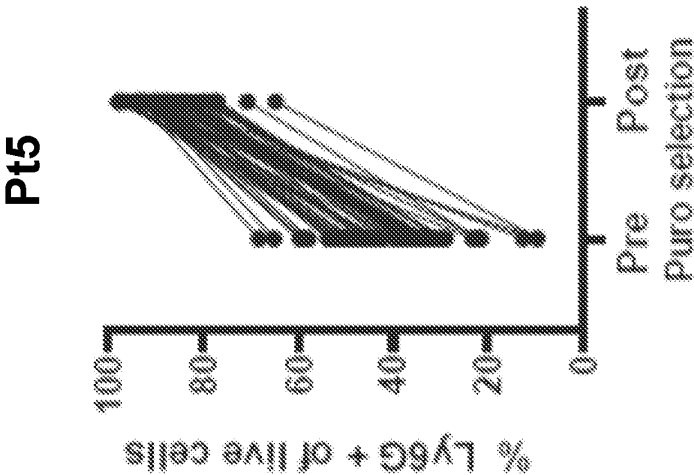


FIG. 8B

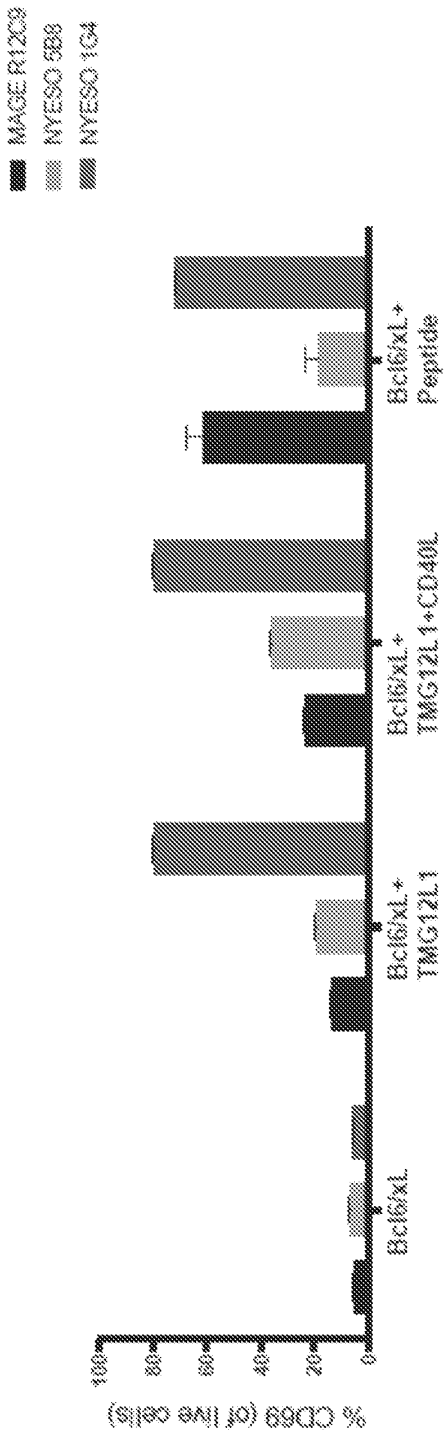


FIG. 9A

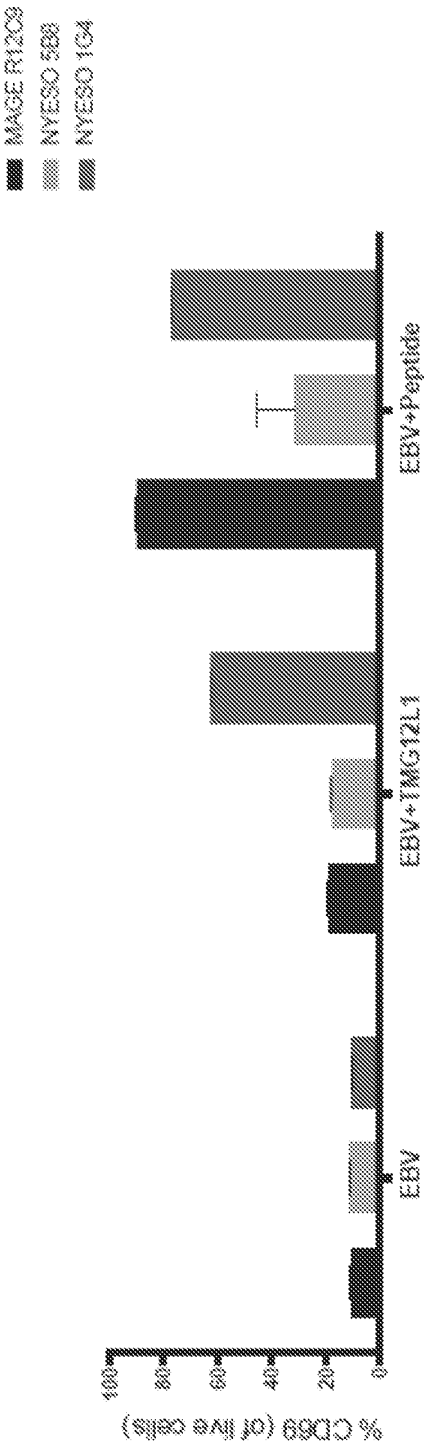


FIG. 9B

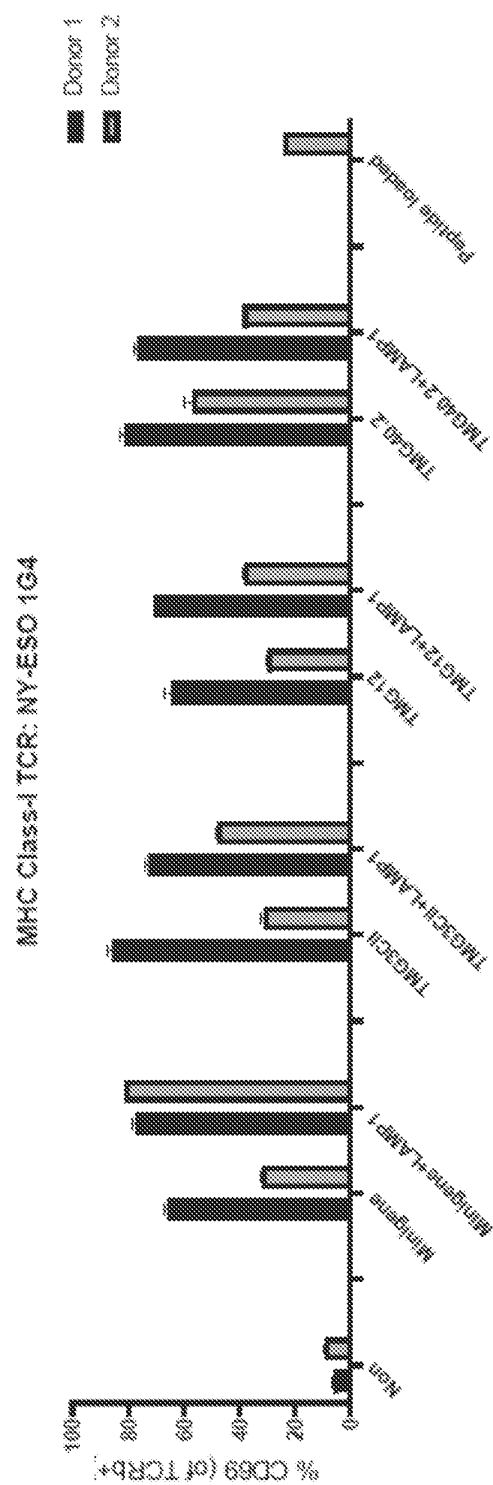


FIG. 9C

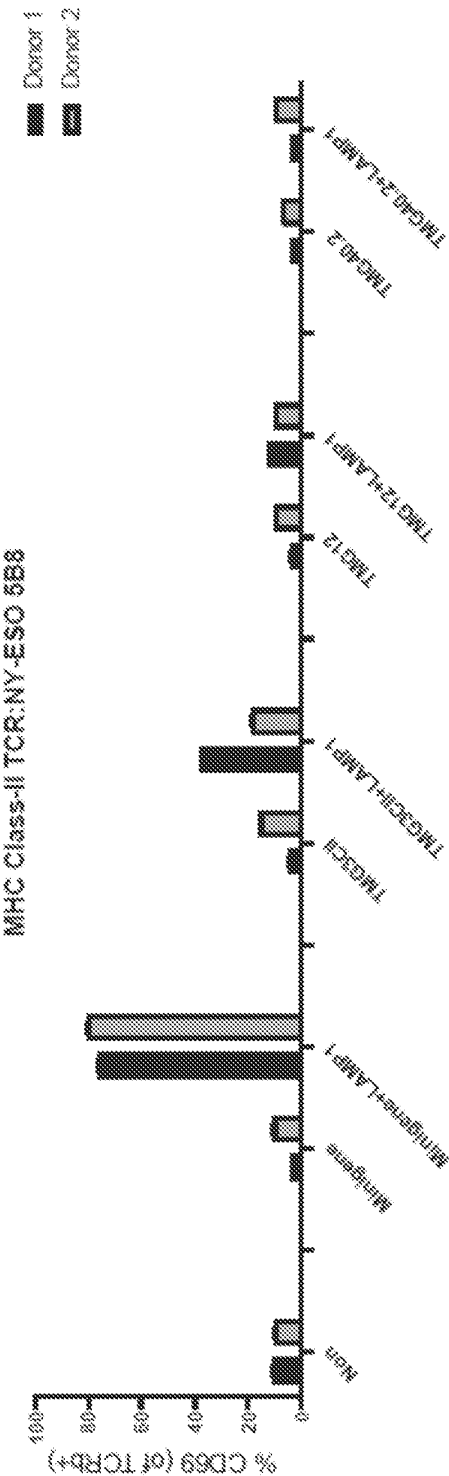


FIG. 9D

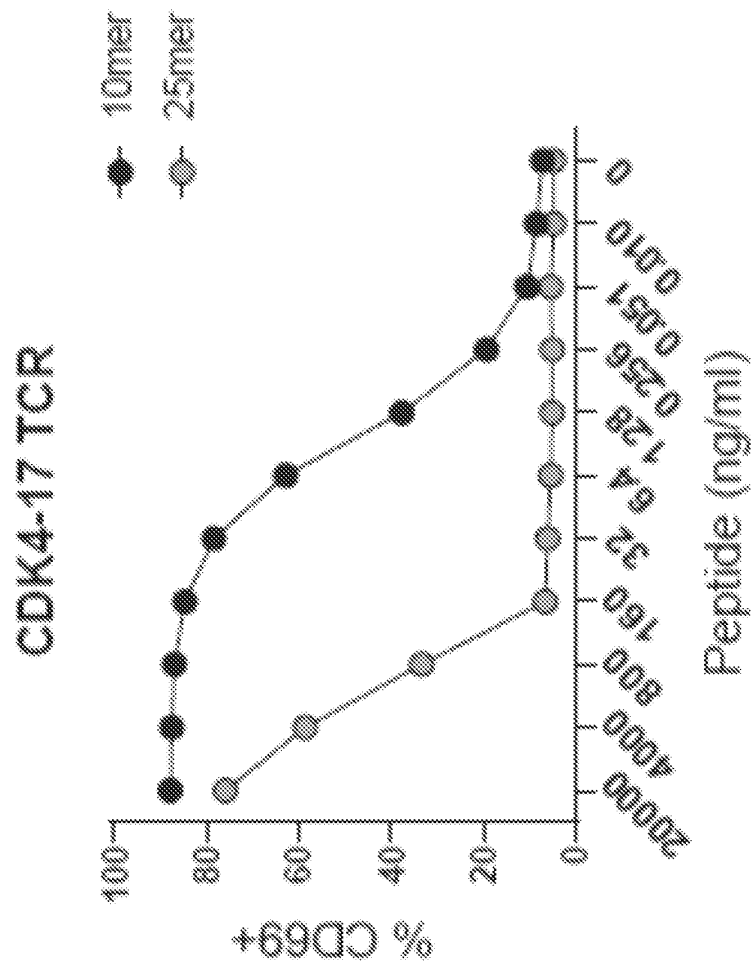


FIG. 10A

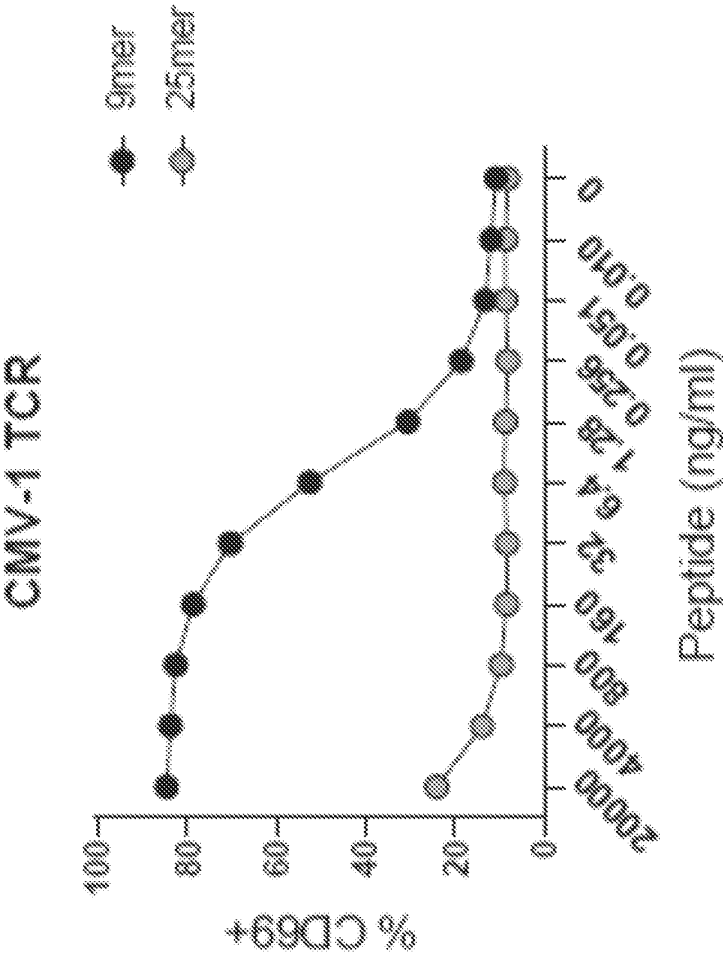


FIG. 10B

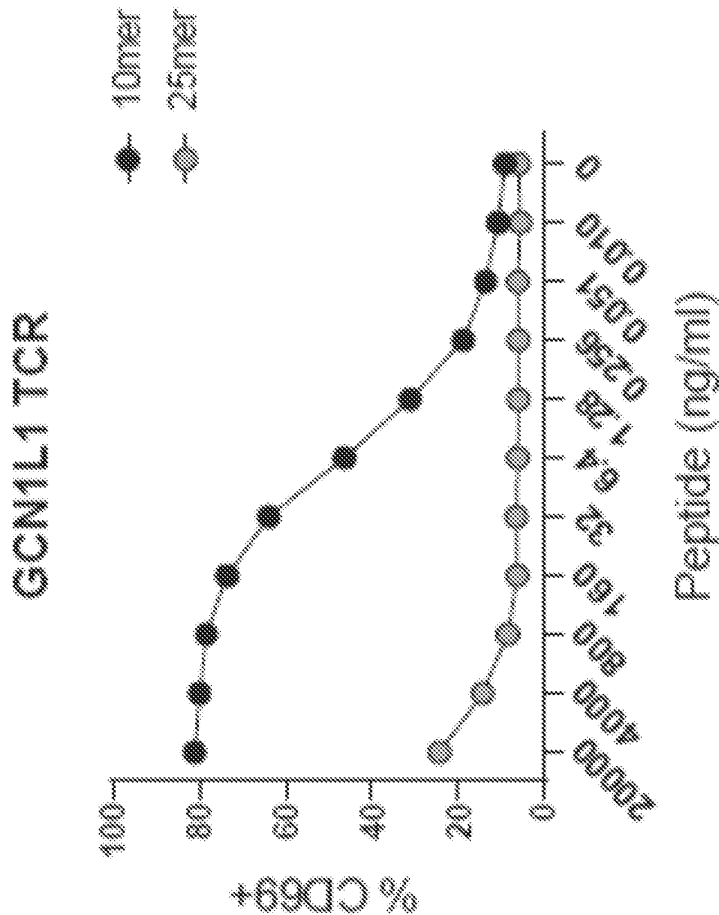


FIG. 10C

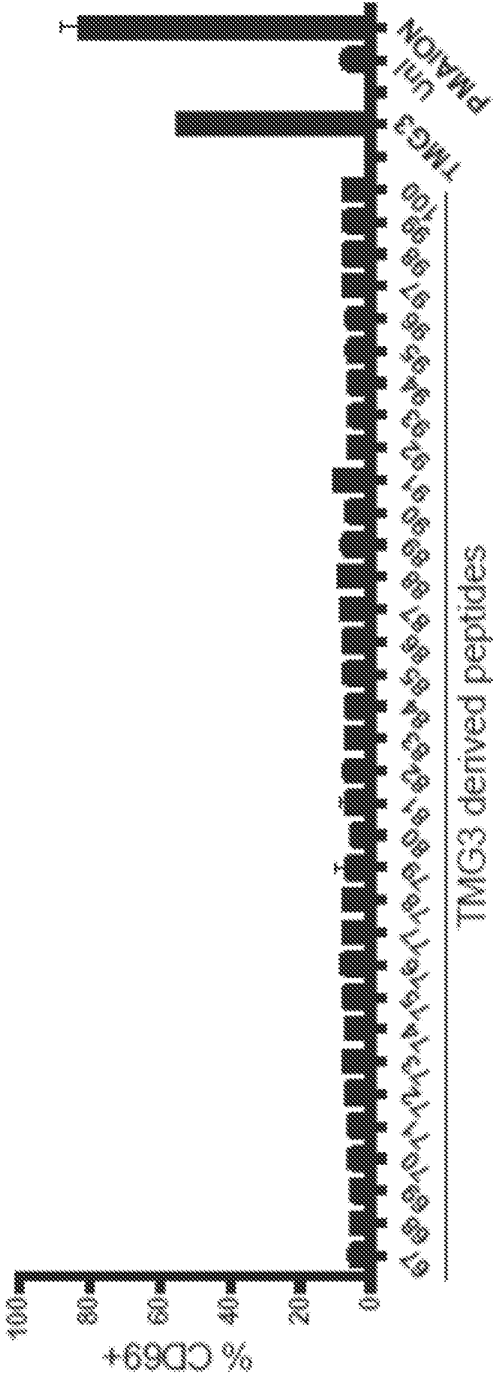


FIG. 10D

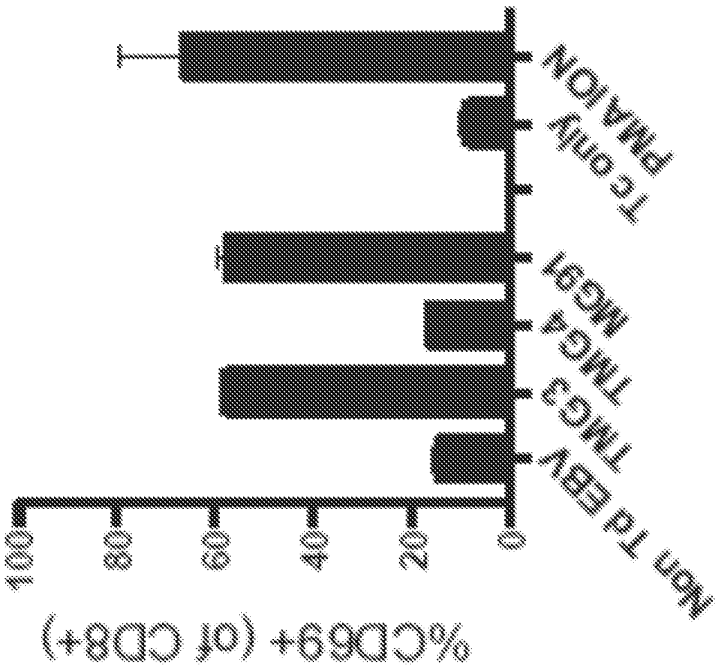


FIG. 10E

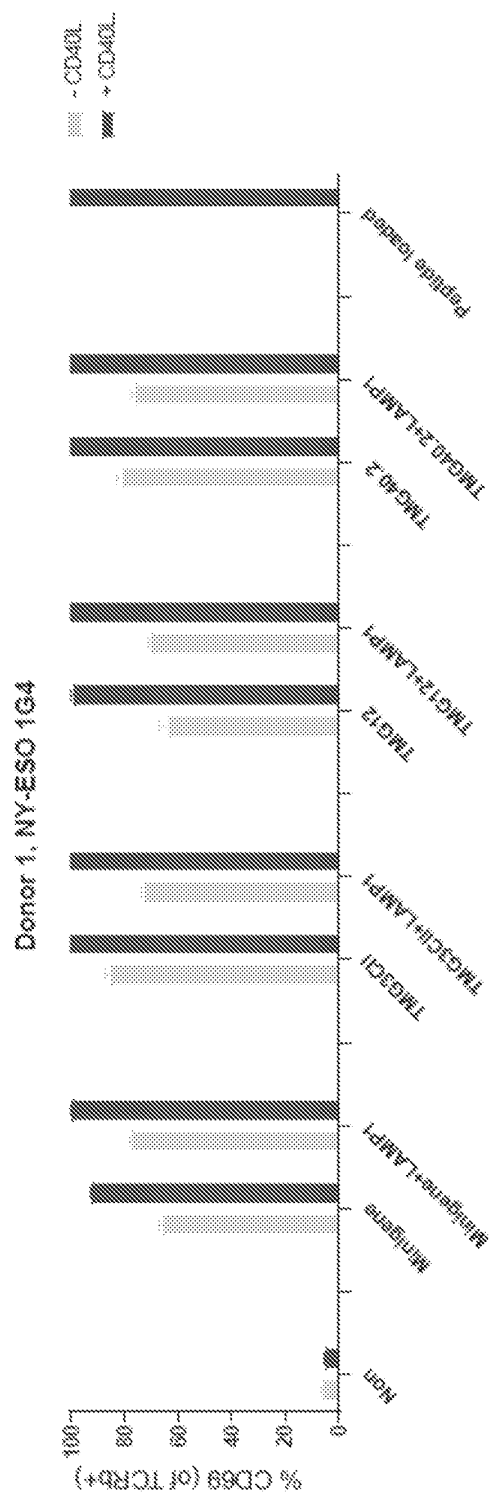


FIG. 11A

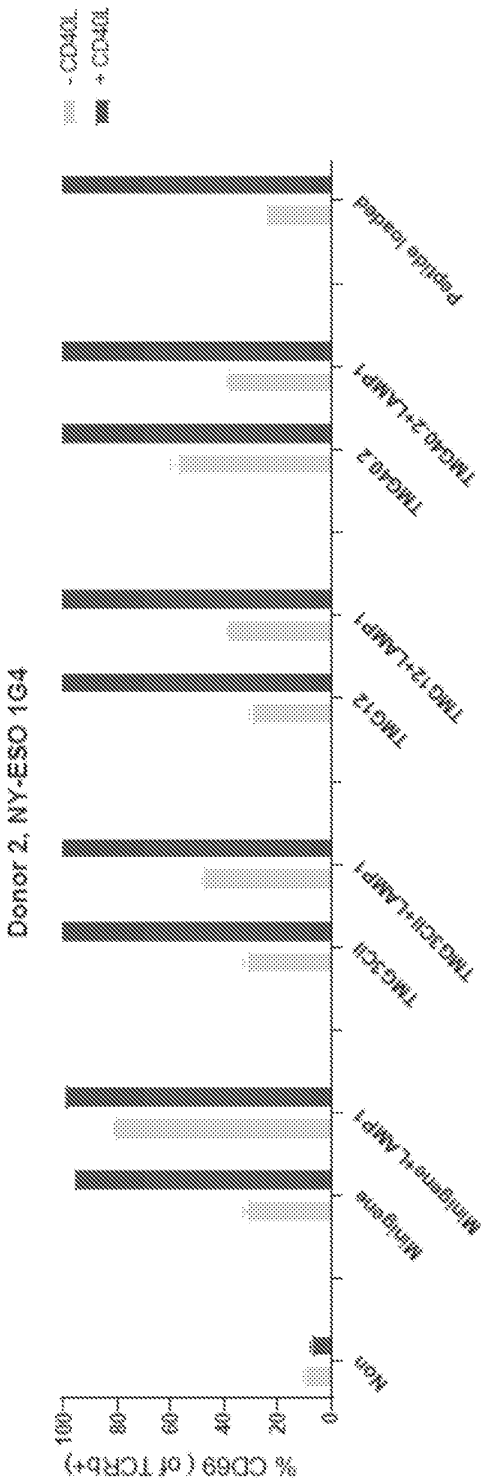


FIG. 11B

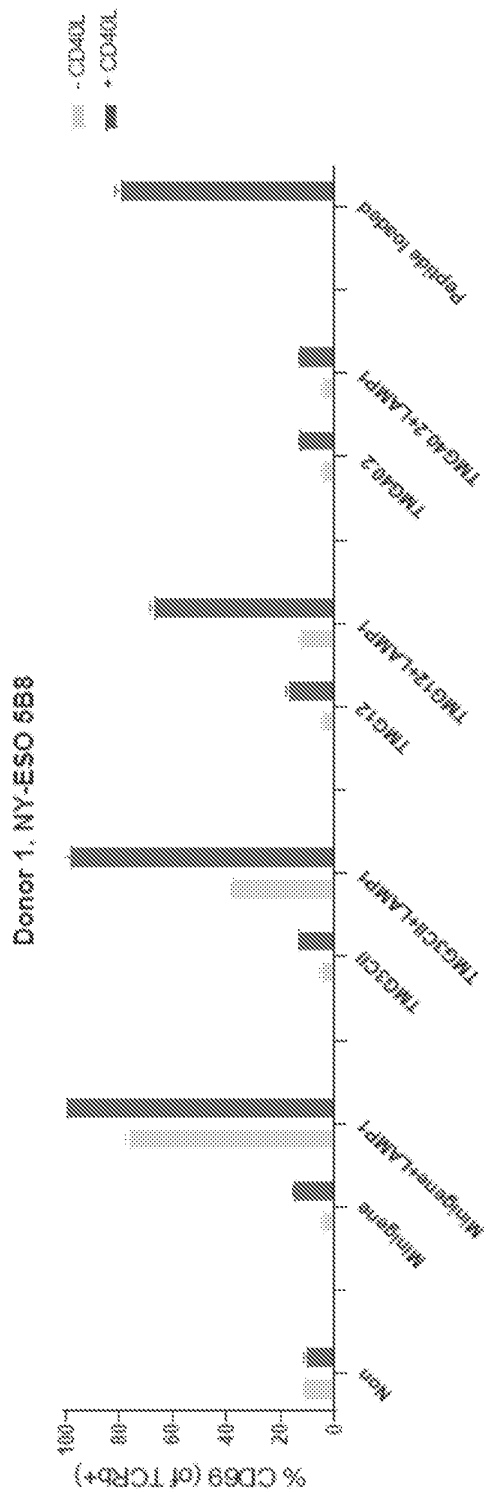


FIG. 11C

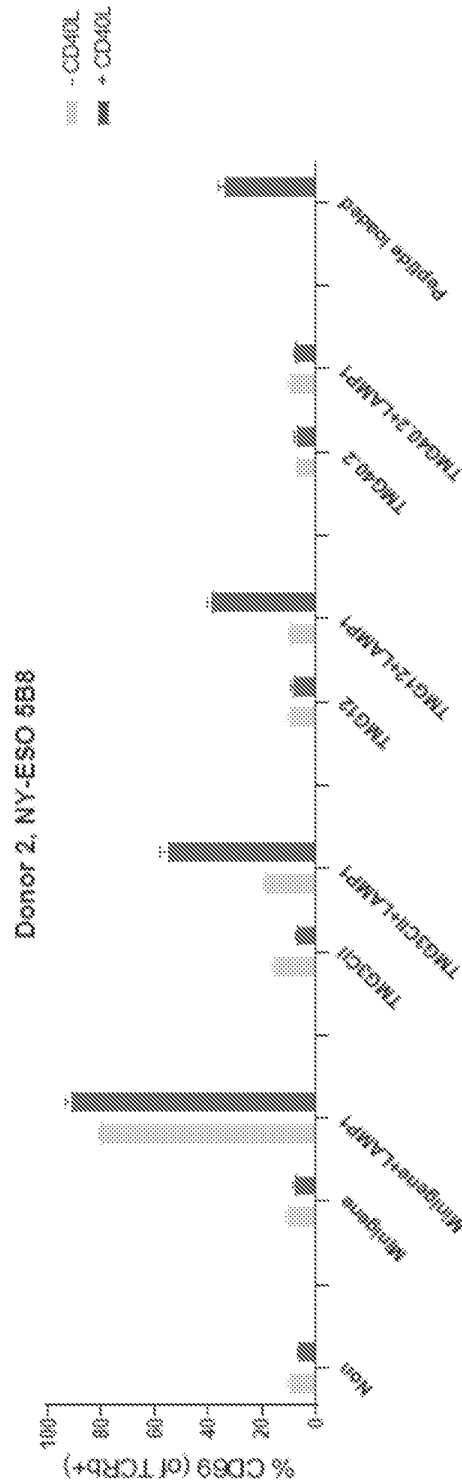


FIG. 11D

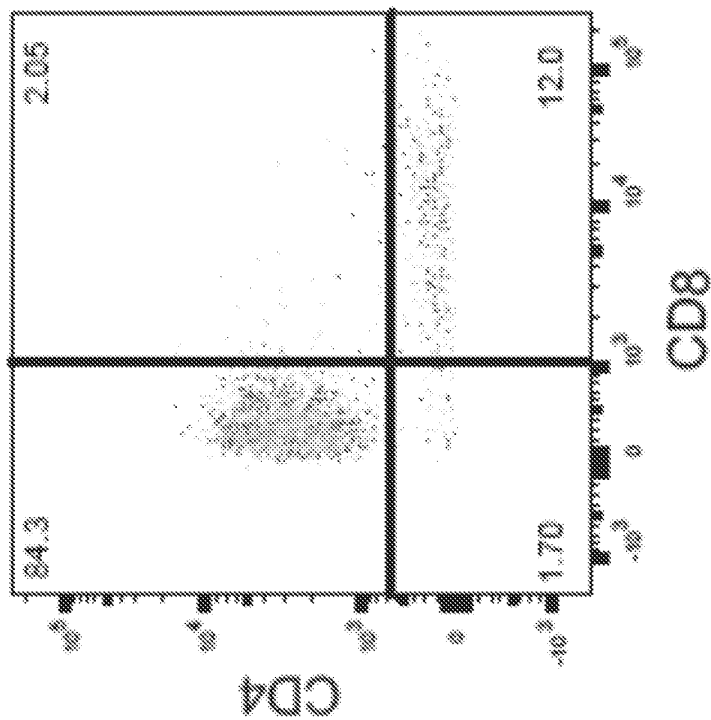


FIG. 12A

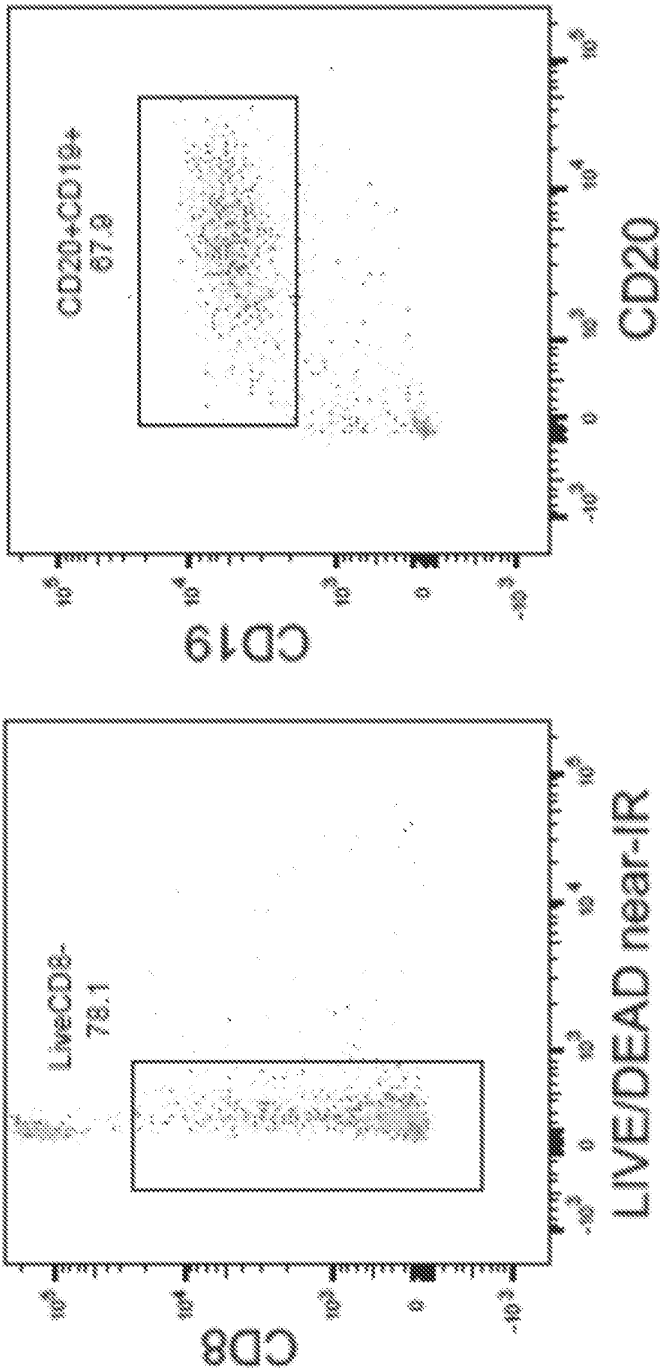


FIG. 12B

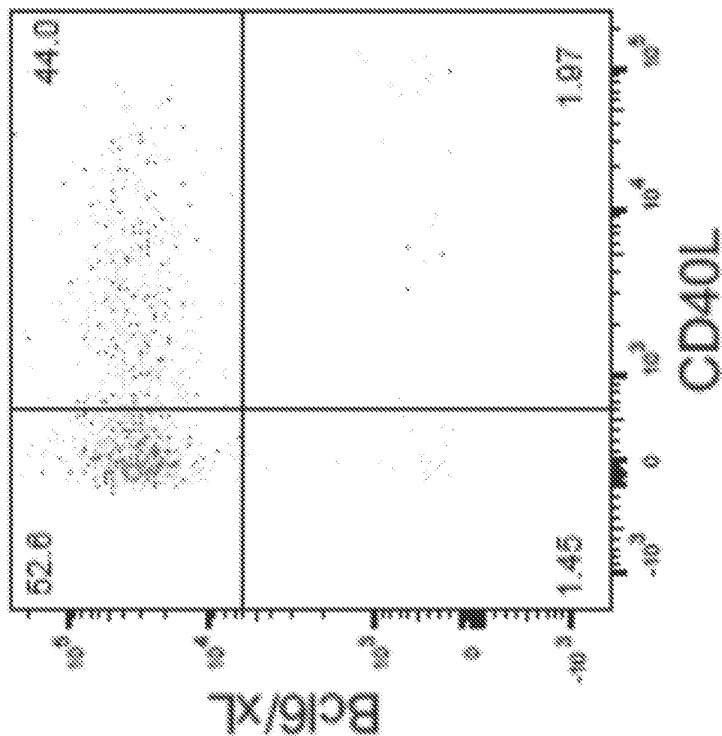


FIG. 12C

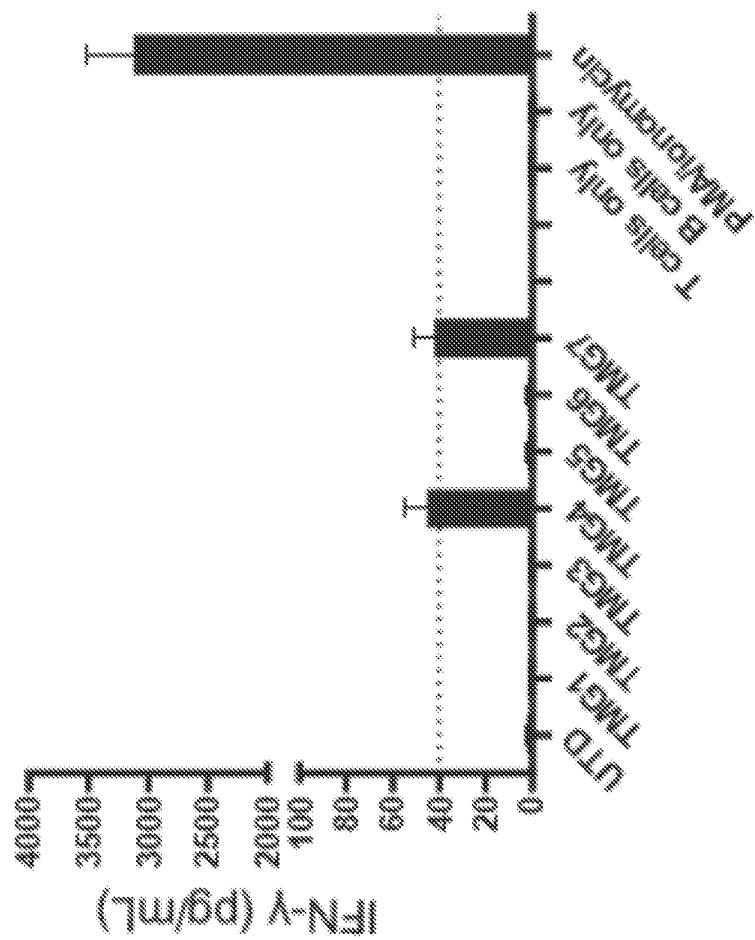


FIG. 12D

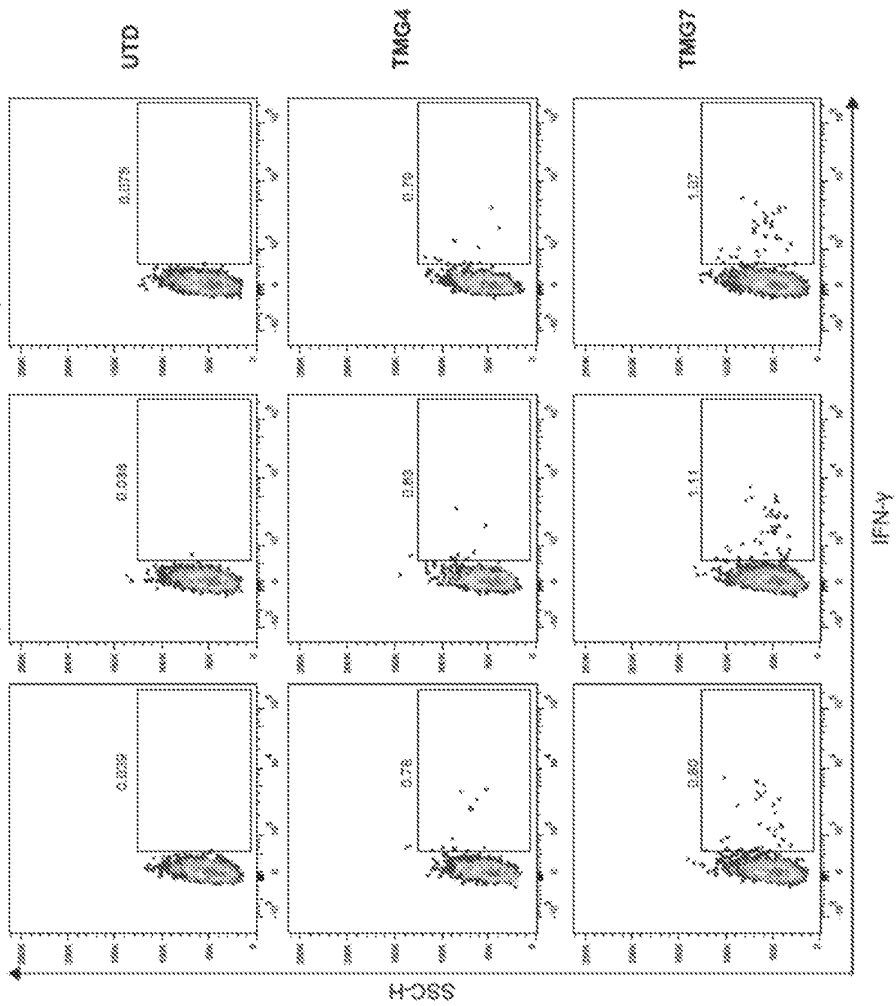


FIG. 12E



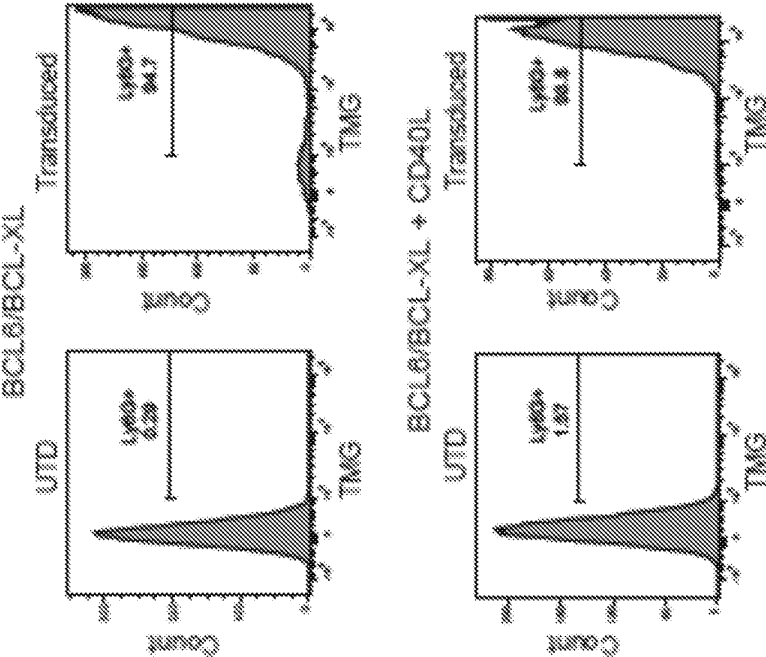


FIG. 13B

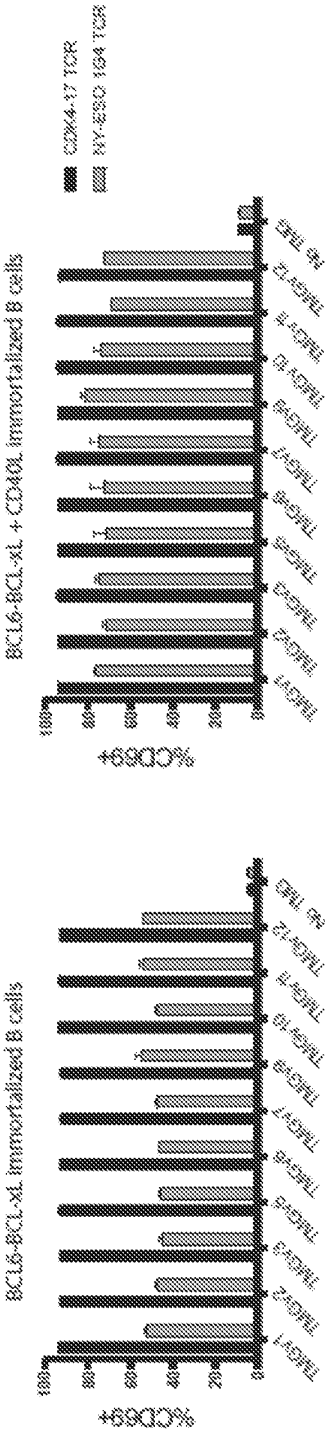


FIG. 13C

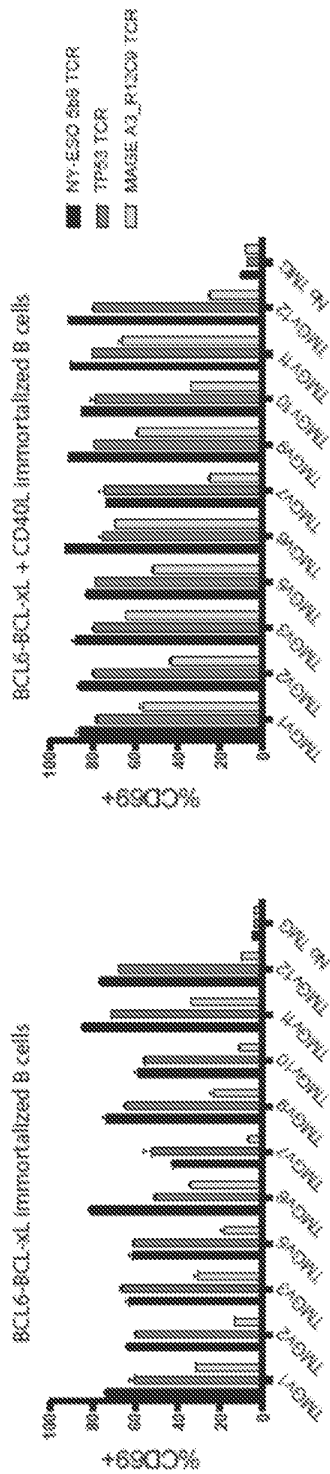
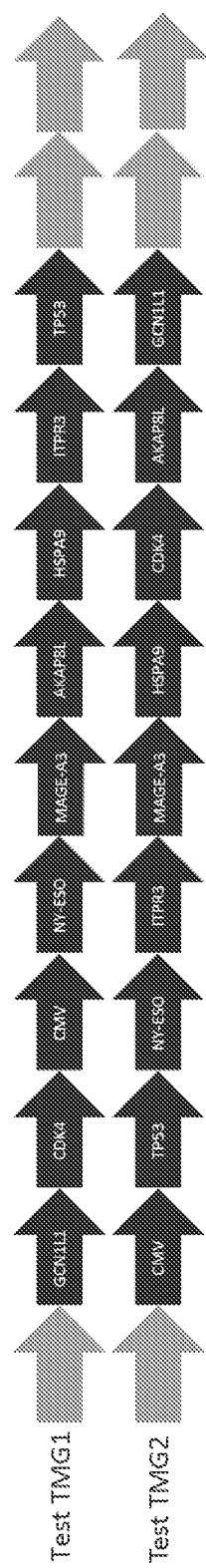


FIG. 13D

FIG 13E



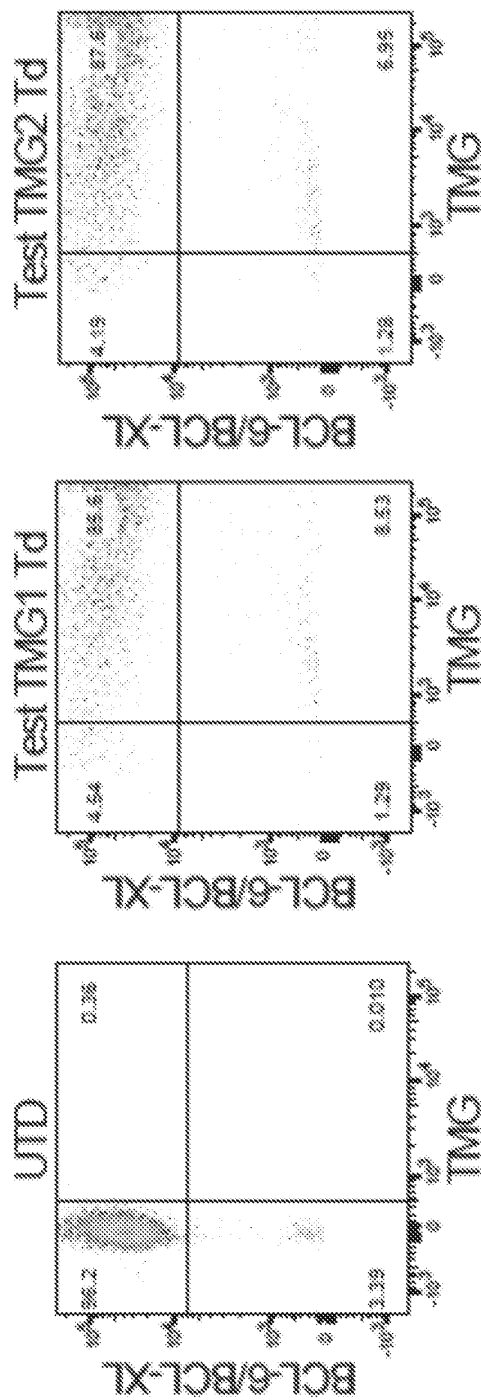


FIG. 13F

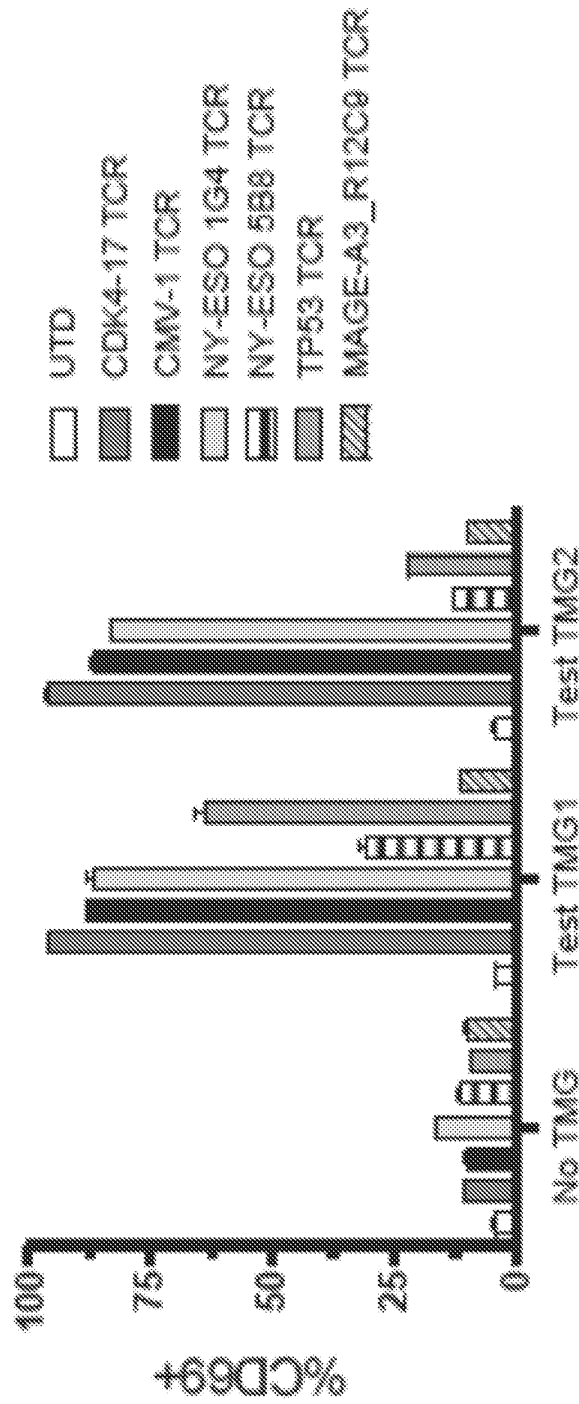


FIG. 13G

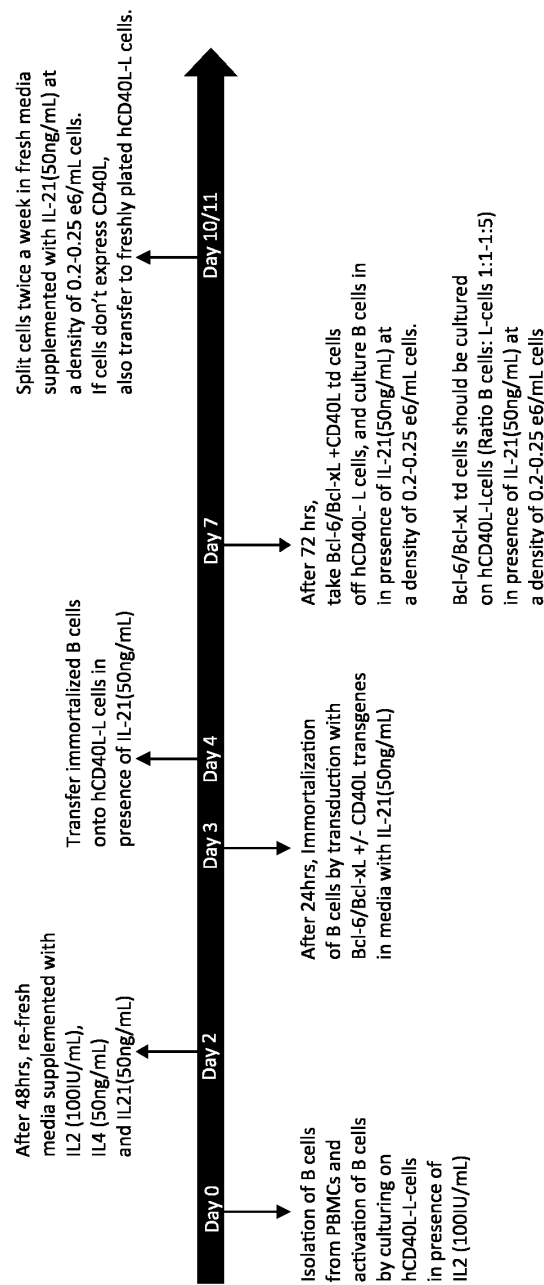


FIG. 14

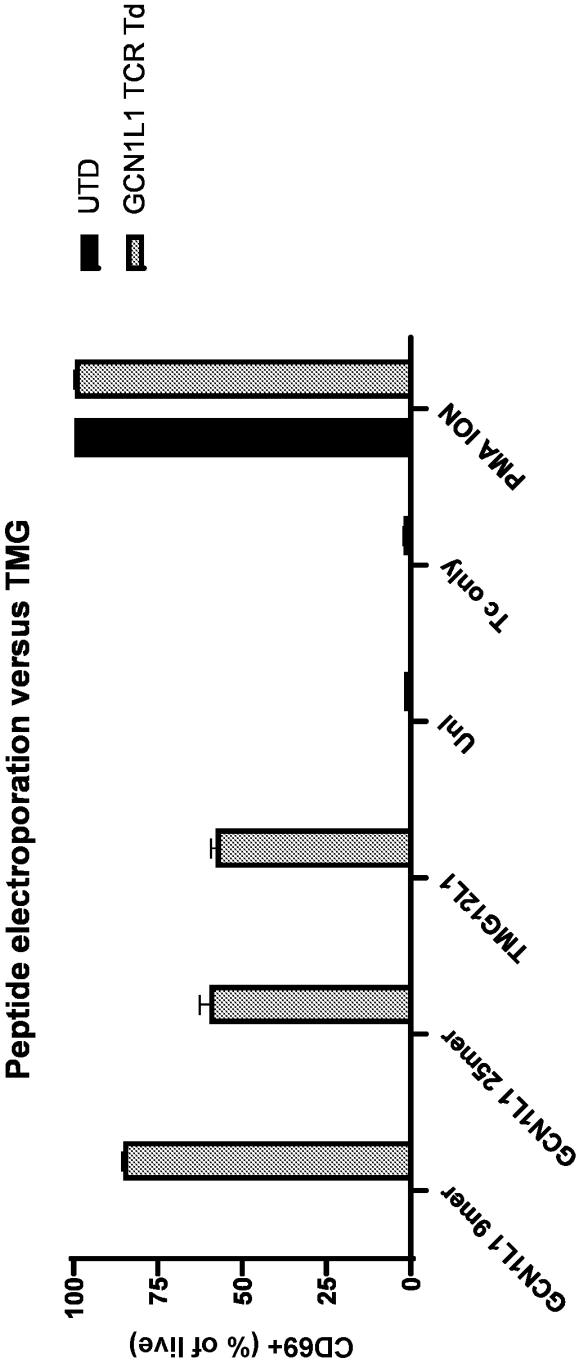


FIG. 15

FIG. 16C

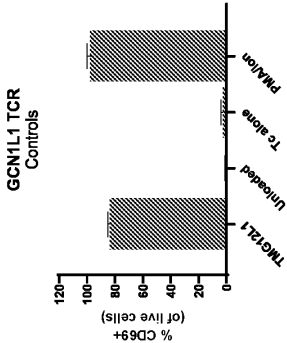


FIG. 16B

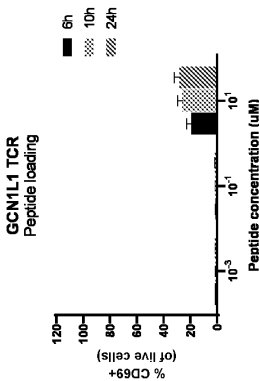


FIG. 16A

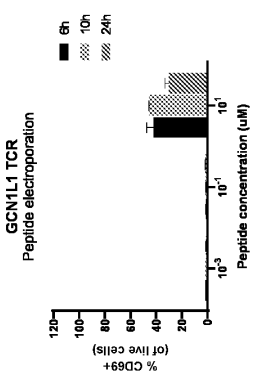


FIG. 17C

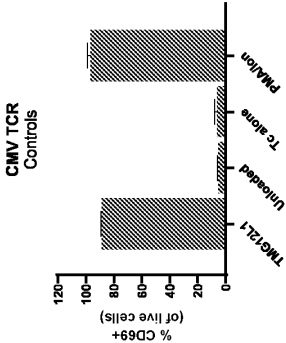


FIG. 17B

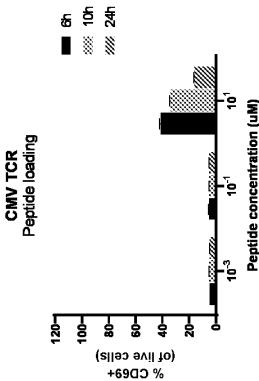


FIG. 17A

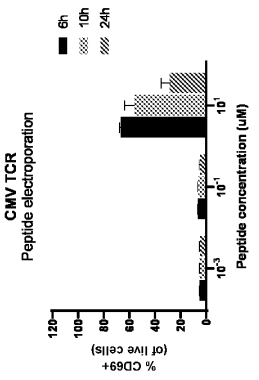


FIG 18A

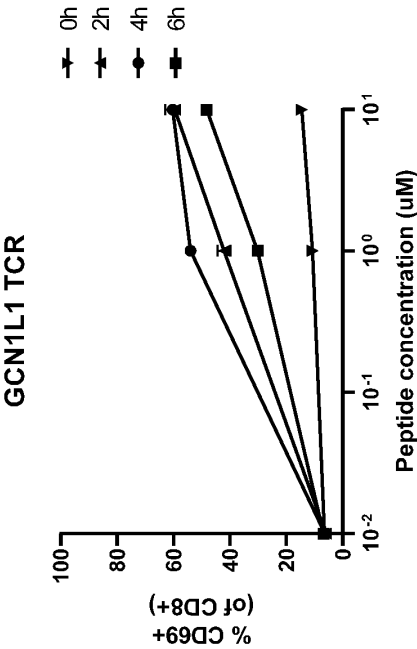
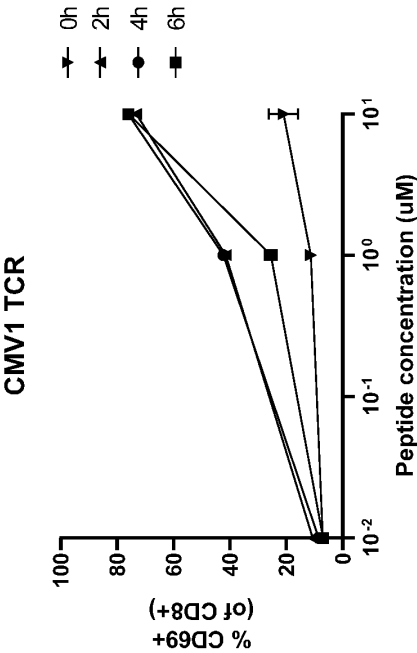


FIG 18B



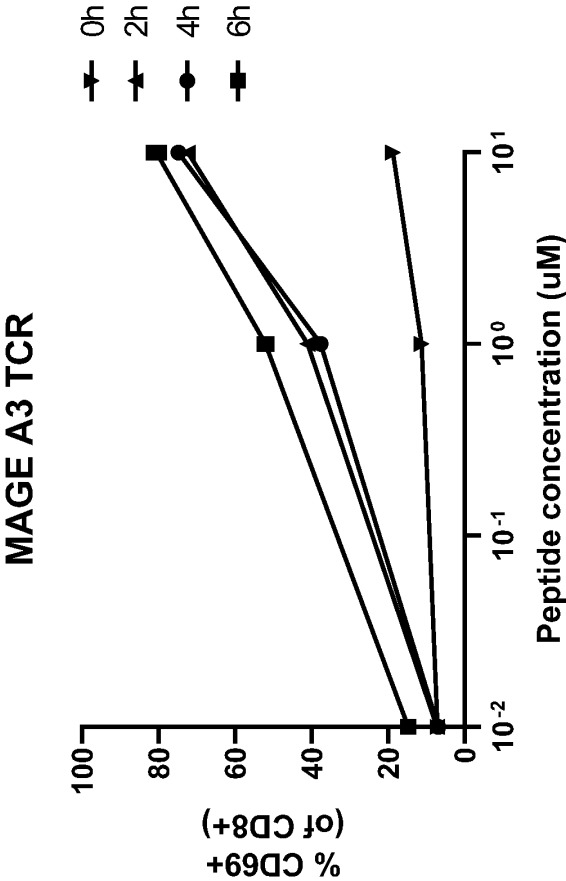


FIG 18C

FIG 19A

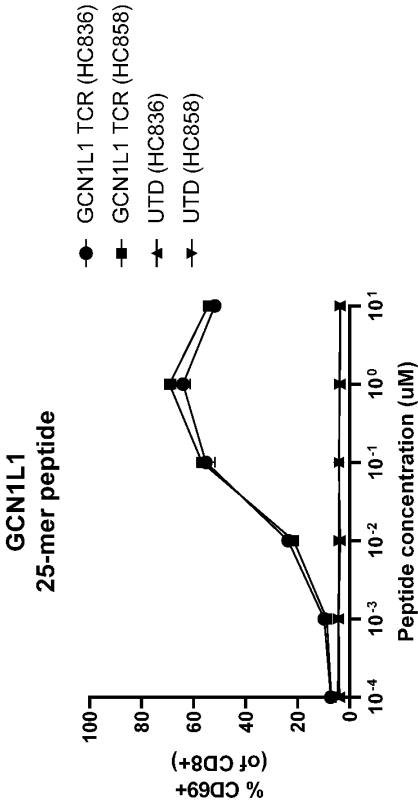
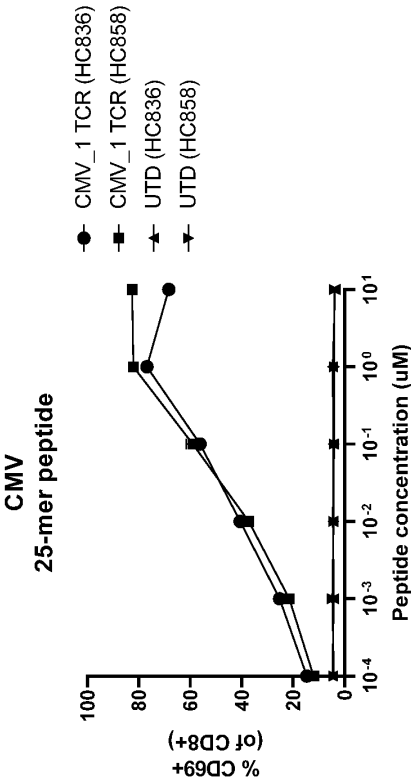


FIG 19B



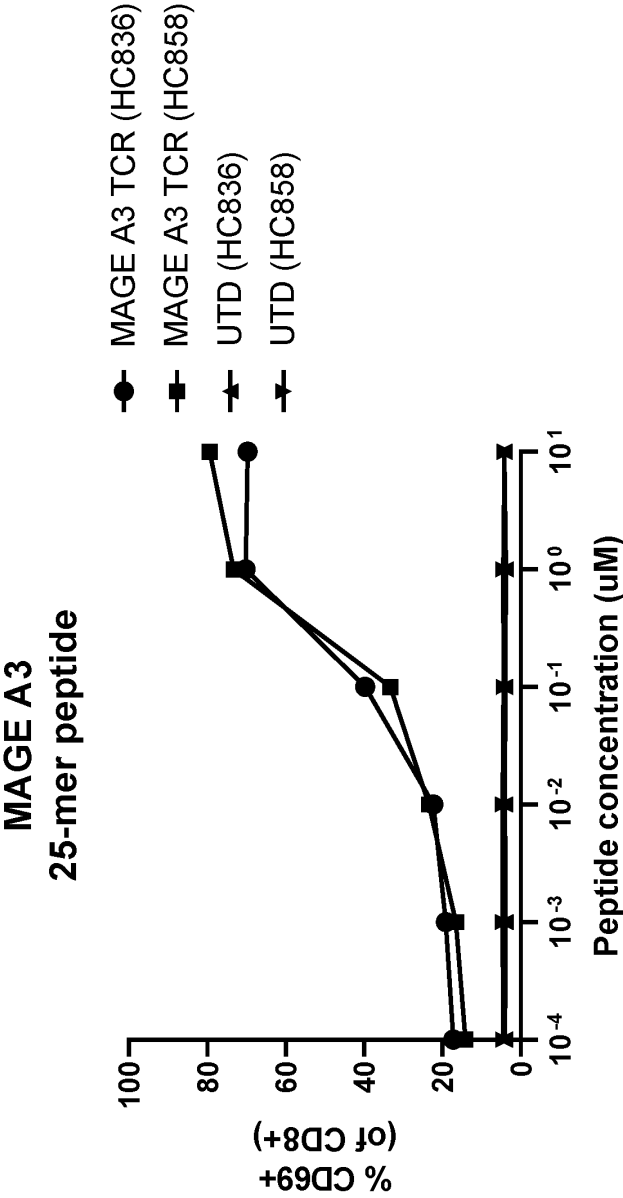
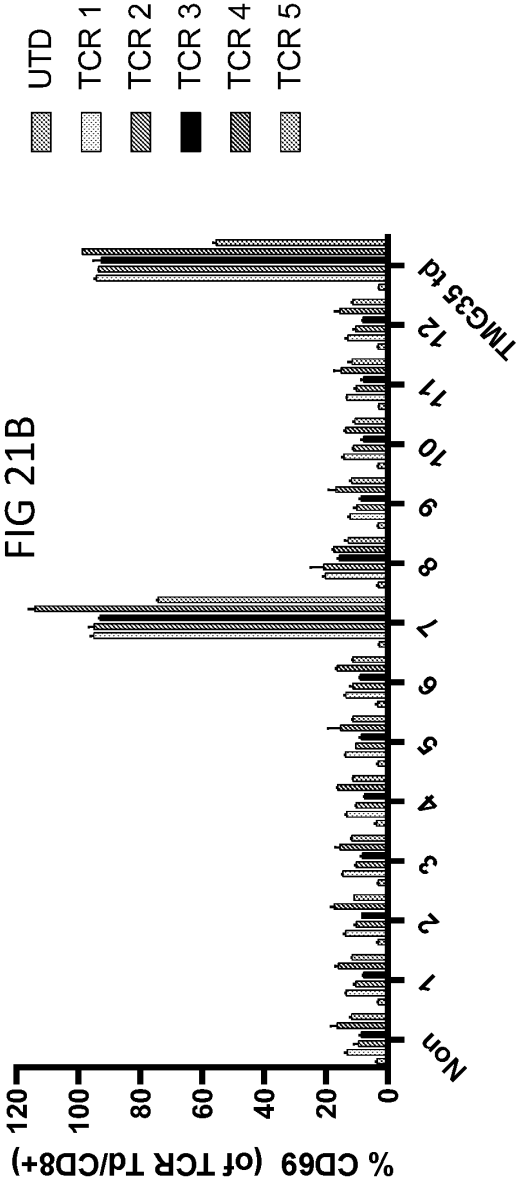
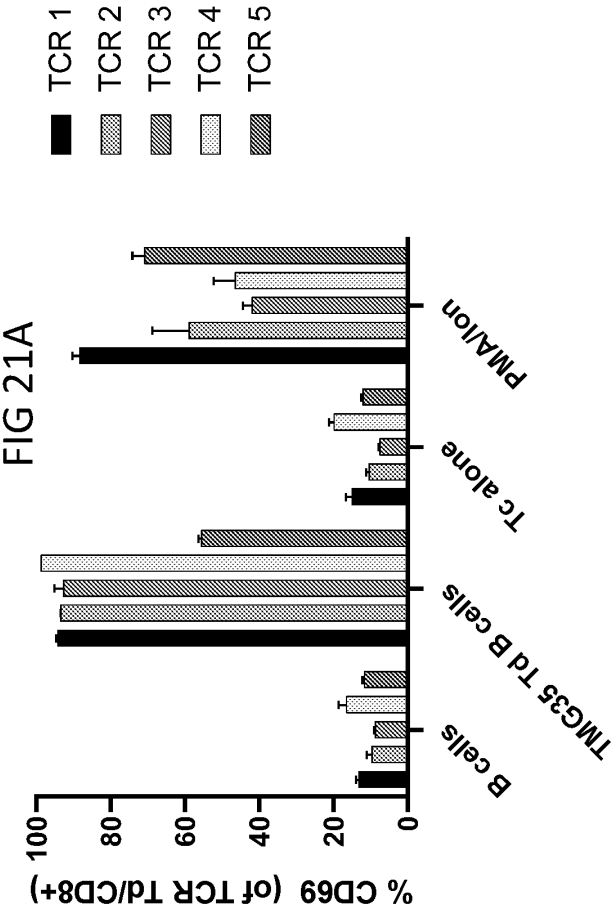
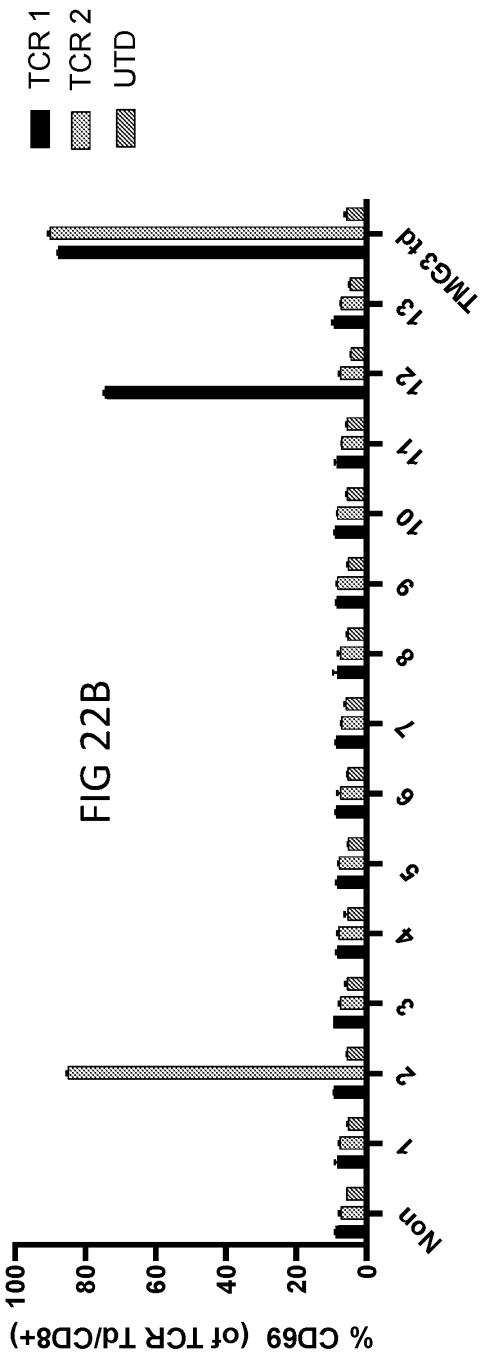
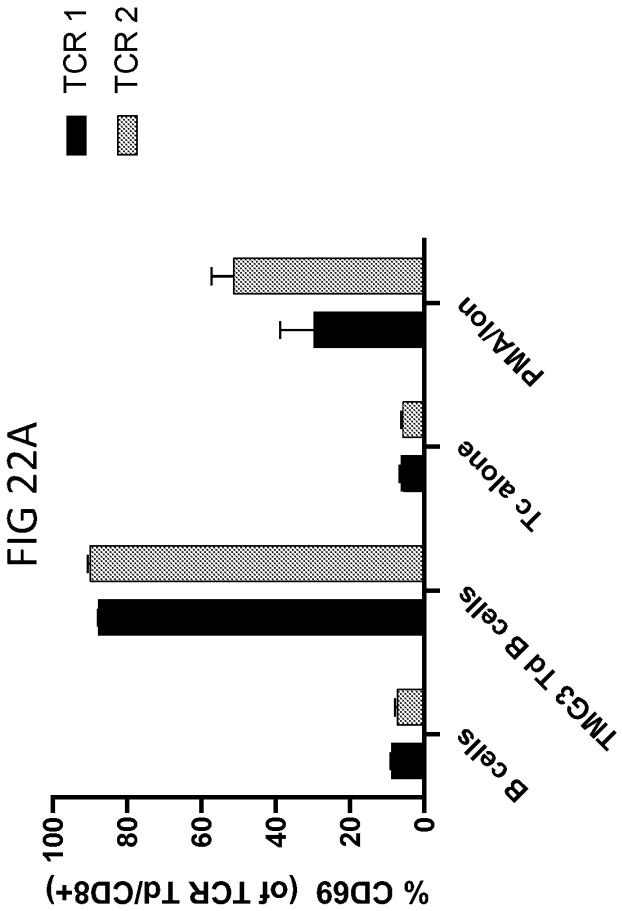


FIG 20





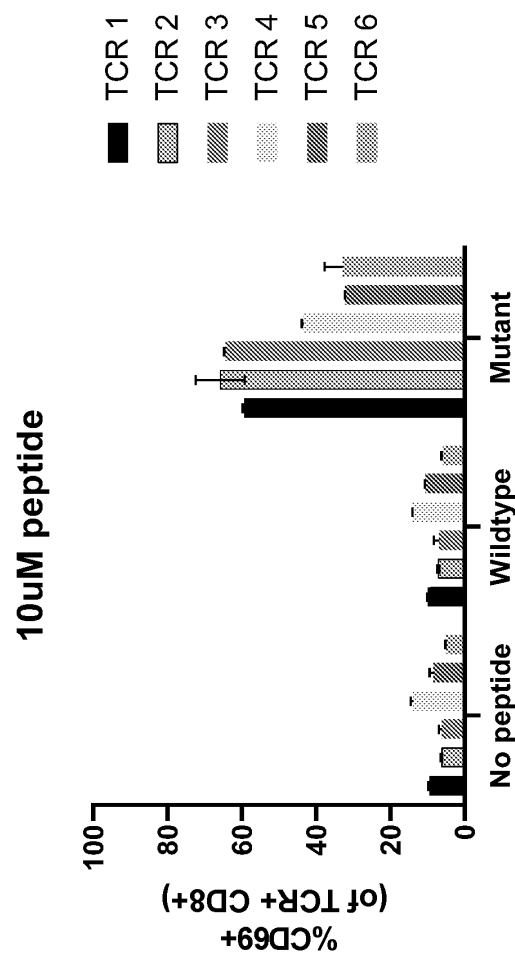


FIG 23