

**SPECIFIC CONJUGATION LINKERS, SPECIFIC IMMUNOCONJUGATES
THEREOF, METHODS OF MAKING AND USES SUCH CONJUGATES THEREOF**

ABSTRACT

The present invention relates to novel linkers containing a 2,3-disubstituted succinic group, or 2-monosubstituted, or 2,3-disubstituted fumaric or maleic (*trans (E)*- or *cis (Z)*-butenedioic), or acetylenedicarboxyl group for conjugation of a cytotoxic agent, and/or one or more different functional molecules per linker to a cell-binding molecule, through bridge linking pairs of thiols on the cell-binding molecule specifically. The invention also relates to methods of making such linkers, and of using such linkers in making homogeneous conjugates, as well as of application of the conjugates in treatment of cancers, infections and autoimmune disorders.

Fig. 6