

Title (en)

AB5 TOXIN B SUBUNIT MUTANTS WITH ALTERED CHEMICAL CONJUGATION CHARACTERISTICS

Title (de)

MUTANTEN DER B UNTEREINHEIT DES AB5 TOXINS MIT VERÄNDERTER CHEMISCHER KONJUGATIONSMERKMALE

Title (fr)

MUTANTS DE LA SOUS-UNITE B DE LA TOXINE AB 5? AUX CARACTERISTIQUES DE CONJUGAISON CHIMIQUE MODIFIEES

Publication

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Application

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Priority

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Abstract (en)

[origin: WO0127144A2] A recombinant AB5 B subunit protein including at least one mutation, wherein the mutation alters the number of amino acid residues available for chemical modification as compared to a wild type AB5 B subunit protein, and wherein said recombinant protein retains an effective target ligand bind affinity. For example, specifically designed mutations are produced in the cholera Toxin B subunit (CTB) such that it can still bind with high affinity to its receptor, Gm-1, but can be specifically covalently linked at lysines or cysteines to an immunogen or vaccine. The vaccine produced from this coupling is a mucosal vaccine which has high immunogenicity due to the interaction with the CTB. The vaccine can be produced inexpensively and easily. Alternatively, a technique is disclosed for treating CTB such that non-covalent coupling to a vaccine or immunogen can occur.

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