

20. A pharmaceutical composition comprising the monoclonal antibody of claim 3 in a concentration sufficient to inhibit botulism poisoning, together with a pharmaceutically acceptable carrier.

21. A kit for detecting BoNT/A in a biological sample, said kit comprising:

- (1) a container holding at least one monoclonal antibody selected from the group consisting of MAb 4A2-2, MAb 6B2-2, and MAb 6C2-2; and
- (2) instructions for using the antibody for the purpose of binding to BoNT/A to form an immunological complex and detecting the formation of the immunological complex such that presence or absence of immunological complex correlates with presence or absence of BoNT/A in said sample.

22. A vaccine for BoNT/A comprising antigenic peptide epitopes recognized by at least one monoclonal antibody selected from the group consisting of 4A2-2, 6B2-2, and 6C2-2.

23. A vaccine according to claim 22 wherein said peptides are chosen from the group consisting of SEQ ID NO:2 and SEQ ID NO:3.

24. A vaccine according to claim 22 wherein said peptides comprise the region of BoNT/A Hc encompassing amino acid residues 1150-1289 (SEQ ID NO:1).

25. A vaccine according to claim 24 wherein said peptides comprise the region of BoNT/A Hc encompassing amino acid residues 1157-1253 of SEQ ID NO:1.

26. A pharmaceutical composition comprising a peptide encoded by any of SEQ ID NO:2 and SEQ ID NO:3, in a pharmaceutically acceptable amount, in a pharmaceutically acceptable carrier and/or adjuvant.

27. A method for capturing BoNT/A from a sample, said method comprising contacting said sample with one or more monoclonal antibody selected from the group consisting of 4A2-4, 6B2-2, and 6C2-2, and isolating the complex formed between the BoNT/A in the sample and the monoclonal antibody.

28. The method according to claim 27 wherein said sample is selected from the group consisting of: biological fluid and animal tissue.

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