of time even across a wide temperature range, for example, a freezing temperature, a refrigerant temperature, normal temperature, and a high temperature.

[0008] Therefore, the present invention provides a pharmaceutical lyophilized preparation comprising 1) botulinum toxin; 2) polysorbate; and 3) methionine; and one or more components selected from the group consisting of 4) sugar, sugar alcohol, and an ionic compound.

[0008a] The present invention also provides a pharmaceutical lyophilized preparation comprising:

botulinum toxin, polysorbate, and methionine; and

one or more components selected from the group consisting of sugar, sugar alcohol, and an ionic compound and wherein the preparation is free of an animal protein stabilizer.

[Effect]

[0009] The lyophilized preparation of botulinum toxin according to the present invention can maintain an activity of botulinum toxin, and also exhibit excellent long-term storage stability even under conditions of high temperature, which may occur when botulinum toxin is stored, delivered, and processed.

[Best Mode]

[0010] The lyophilized preparation of botulinum toxin according to the present invention comprises 1) botulinum toxin, 2) polysorbate, and 3) methionine, which have been added to the conventional liquid preparation; and further includes one or more selected from the group consisting of 4) sugar, sugar alcohol, and an ionic compound as an additional component.

[0011] The additional component functions as maintaining an activity of botulinum toxin, and also stabilizing the activity even at a high temperature higher than normal temperature when bolulinum toxin is prepared in a form of a lyophilized formulation. For a composition including 1) botulinum toxin; 2) polysorbate; and 3) methionine, its stability decreases when being lyophilized, and also decreases at a high temperature higher than normal temperature even when prepared in a liquid