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(54) **VACCINES FOR SUPPRESSING IGE-MEDIATED ALLERGIC DISEASE AND METHODS FOR USING THE SAME**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

Nucleic acid molecules that encode a protein comprising at least one epitope of membrane IgE free of epitopes present on the serum IgE, including proteins that further comprise non-IgE T cell helper epitope are disclosed. Vaccines, vectors and host cells that comprise such nucleic acid molecules are disclosed. Isolated proteins, including haptenized proteins, comprising at least one epitope of membrane IgE free of epitopes present on the serum IgE, including proteins that further comprise non-IgE T cell helper epitope are disclosed. Vaccines that comprise and methods of making such proteins and antibodies that specifically bind to such proteins are disclosed. Vaccines that comprise killed or inactivated cells or particles are disclosed. Methods of treating and preventing IgE mediated allergic disease or condition are disclosed.

22 Claims, 8 Drawing Sheets