

March 22, 2006

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Elucidation of a New Function of "BANK", an Adaptor Molecule

Living organisms are equipped with an immune system that protects them from foreign invaders such as pollens and disease-causing germs through a biological reaction called "immunologic response". The antibodies produced by "B cells" attack foreign antigens of these invaders, and eliminate them from the living organisms.

The immunologic response should be properly balanced so that it is neither too strong nor too weak. We have newly clarified how the immunologic response is regulated, and proved that the key to the adjustment relies on the BANK protein that is exclusively expressed in B cells.

It has been found that "BANK" represses the intracellular signaling pathways that control the survival or proliferation of cells after receiving the antigen-triggered information from the molecules on the B cell surface. This finding will greatly contribute to the elucidation of immunologic diseases.

The research results were published in the March 21 issue of "*Immunity*".

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