Methods and Compositions for Treating Diseases and Disorders Associated with Natural Killer T-Cells

Published date: Feb. 1, 2012

Technology description

Summary

The invention relates to the discovery that C12 beta-D-galactosyl ceramide may be used to deplete or inactivate NKT cell populations. These findings suggest methods for using C12 beta-D-galactosyl ceramide to treat conditions that would benefit from depletion of NKT cells, such as certain autoimmune diseases (e.g. lupus, MS) and AIDS.
The presence of NKT cells can be associated with either beneficial effects or pathology. Deficiencies in NKT cells are associated with at least some types of autoimmune disease, including type 1 diabetes and autoimmune gastritis in mice. In contrast, NKT cells augment autoantibody secretion and lupus development in lupus-prone mouse models and therefore lupus patients may benefit from the depletion of NKT cells. The remission state of multiple sclerosis (MS) is also associated with decreased levels of NKT cells, suggesting NKT cell depletion as a method of treatment for MS.

Institution

NIH - National Institutes of Health

联系我们

叶先生

电 话：021-65679356

手 机：13414935137

邮 箱：yeyingsheng@zf-ym.com