Variable Receptors of Natural Killer Cells that Recognize Major Histocompatibility Complex Class I Molecules

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Abstract

Interactions between major histocompatibility complex (MHC) class I molecules and various types of lymphocyte receptor control the development and immune response of natural killer (NK) cells and T cells. NK cells have vital functions in innate immunity, adaptive immunity and placental reproduction. The variable receptors of NK cells that recognize MHC class I are rapidly evolving and highly species specific. Thus human receptors for HLA-A, B and C (human MHC class I molecules), the killer cell immunoglobulin-like receptors (KIR) have counterparts only in simian primates. Combinations of HLA class I and KIR factors are associated with a wide range of human diseases.

Selected Publications


