

Keywords and Phrases for NK Cells and iNKT Cells

Able to recognize and kill infected cells, cancer cells, and stressed cells.

antibody-dependant cellular cytotoxicity (ADCC)

Bind to these stress-induced molecules; sends a positive signal that enables the NK cell to kill the cell to which it has bound unless the second receptor cancels that signal.

Destroy the structural cytoskeleton proteins and cellular DNA.

duel receptor system: the killer-activating receptor and the killer-inhibitory receptor

Glycolipid antigens bind to TCRs on the iNKT cell.

Have T-cell receptors (TCRs) on their surface for glycolipid antigen recognition.

IgG antibody molecules bind to foreign antigens on the surface of the cell.

Play a regulatory role in the development of autoimmune diseases, asthma, and transplantation tolerance.

Promote and suppress different innate and adaptive immune responses.

Recognizes MHC-I molecules that are usually present on all nucleated human cells.

The NK cell releases pore-forming proteins called perforins and proteolytic enzymes called granzymes.

The killer-inhibitory receptors on the NK cell recognize the MHC-I/peptide complexes and send a negative signal that overrides the original kill signal and prevents the NK cell from killing the cell to which it has bound.

Without the signal from the killer-inhibitory receptor, the kill signal from the killer-activating signal is not overridden and the NK cell kills the cell to which it has bound by inducing apoptosis.