ABSTRACT

NK cells (natural killer cells) play a key role in innate immunity. Their function is to recognize and kill infected, stressed or malignantly transformed cells. A range of surface receptors promotes this recognition. Cytotoxic mechanisms, lead to induction of apoptosis in the target cell. Receptor NKp30 is one of cytotoxic reaction triggers. It belongs, with NKp46 and NKp44, to NCR (natural cytotoxicity receptors) family.

This work describes preparation of NKp30 receptor with natural and simple glycosylation in expression system of human embryonic kidney cell line 293 (HEK293). It was found that glycosylated receptor NKp30 forms noncovalent oligomers. Equilibrium is formed in solution between oligomers and monomers. Oligomerization depends on glycosylation, deglycosylated protein doesn´t form oligomers.

A recombinant endoglycosidase ENDO F_1 was prepared for purposes of deglycosylation.