

The present invention relates to a method for the absolute quantification of naturally processed HLA-restricted cancer peptides, i.e. the determination of the copy number of peptide(s) as presented per cell. The present invention can not only be used for the development of antibody therapies or peptide vaccines, but is also highly valuable for a molecularly defined immuno-monitoring, and useful in the processes of identifying of new peptide antigens for immunotherapeutic strategies, such as respective vaccines, antibody-based therapies or adoptive T-cell transfer approaches in cancer, infectious and/or autoimmune diseases.