The invention relates to isolated nucleic acid, which codes ligand CD86 of cat, soluble ligand of cat or fragments thereof, which have immune regulatory activity. The invention relates .also to diagnostic oligo nucleototide, vector, which contains this nucleic acid, vaccines for modulation of immune response by cat, which contains an efficient amount of polypeptide coded by said nucleic acid, to a method for induction of cat's immunity and a method for enhancement of immune response by cat, which provides incorporation of such vaccine to cat, and also a method for inhibition of immune response by cat, which provides incorporation to cat of efficiently inhibiting immune response amount of soluble polypeptide, being coded by said nucleic acid. Also presented are vaccines, which contain in addition immunogenes, derivatives of pathogens.