The present invention relates to a polypeptide comprising a human binding domain capable of binding to an epitope of human and non-panzee primate CD3 ε (CD3 epsilon) and a binding domain capable of binding to an epitope of human and non-panzee primate CD3 ε (CD3 epsilon). The invention further relates to nucleic acids encoding for the polypeptide, to vectors comprising the same and to host cells comprising the vector. In another aspect, the invention provides for a pharmaceutical composition comprising the mentioned polypeptide and medical uses of the polypeptide. In a further aspect the invention provides a method for the identification of polypeptides comprising a cross-species specific binding domain capable of binding to an epitope of human and non-panzee primate CD3 ε (CD3 epsilon).