

The present invention relates to mutant polypeptides of the beta chain of the type I IFN receptor (IFNAR2 mutant) with enhanced affinity for interferon-beta as compared to the wild type protein for prolonging the effect of IFN-beta in vivo and to use of said mutant polypeptides for the preparation of medicinal agent for the treatment of multiple sclerosis, rheumatoid arthritis, myasthenia gravis, diabetes, ulcerative colitis and lupus, chronic granulomatous disease, condyloma acuminatum, juvenile laryngeal papillomatosis, hepatitis A or chronic infection with hepatitis B and C viruses, hairy cell leukemia, Kaposi's sarcoma, multiple myeloma, chronic myelogenous leukemia, non-Hodgkins' lymphom or melanoma.