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(54) **Title**: ANTIBODY FUSION PROTEINS WITH MODIFIED FCRN BINDING SITES

(57) **Abstract**: Disclosed are antibody fusion proteins with a modified FcRn binding site and nucleic acid molecules encoding them. The antibody fusion protein include two polypeptide chains, wherein the first polypeptide chain includes a biologically, preferably therapeutically active molecule linked to at least a portion of an immunoglobulin constant region. The second polypeptide chain includes at least a portion of an immunoglobulin constant region. One of the polypeptide chains includes a mutation in the constant region that results in reduction or loss of FcRn binding but does not cause substantial reduction of serum half-life of said antibody fusion protein. In a preferred embodiment the invention relates to respectively constructed Fc-IFNβ molecules. Also disclosed are methods of producing the fusion proteins and methods of using the fusion proteins for treating diseases and conditions alleviated by the administration of the fusion proteins.