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(54) **Title:** ANTIBODIES AGAINST AMYLOID BETA 4 WITH GLYCOSYLATED IN THE VARIABLE REGION

(57) **Abstract:** The present invention relates to a purified antibody molecule preparation being characterized in that at least one antigen binding site comprises a glycosylated asparagine (Asn) in the variable region of the heavy chain (V_H). More specifically, a pharmaceutical and a diagnostic composition comprising said antibody molecule and antibody mixtures are provided which is/are capable of specifically recognizing the β-A4 peptide/Aβ4. The present invention relates in particular to a mixture of antibodies comprising one or two glycosylated antigen binding sites with a glycosylated asparagine (Asn) in the variable region of the heavy chain, i.e. mixtures of isoforms of antibodies which comprise a glycosylated Asn in the variable region of the heavy chain (V_H). Also disclosed are compositions or antibody preparations comprising the specifically glycosylated antibody isoforms. Furthermore, the pharmaceutical and diagnostic uses for these antibodies are provided. The antibody isoforms may for example be used in the pharmaceutical intervention of amyloidogenesis or amyloid-plaque formation and/or in the diagnosis of the same.

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