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(54) **Title**: FC REGION-CONTAINING POLYPEPTIDES THAT EXHIBIT IMPROVED EFFECTOR FUNCTION DUE TO ALTERATIONS OF THE EXTENT OF FUCOSYLATION, AND METHODS FOR THEIR USE

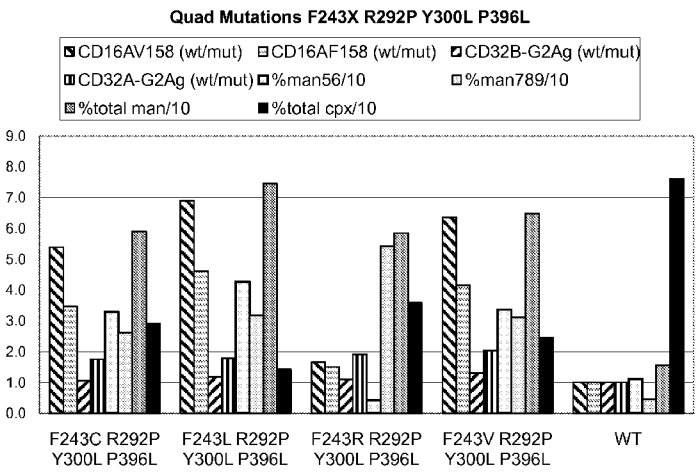


Figure 43

(57) **Abstract**: The present invention relates to Fc region-containing polypeptides that exhibit improved effector function due to alterations of the extent of fucosylation, and to methods of using such polypeptides for treating or preventing cancer and other diseases. The Fc region-containing polypeptides of the present invention are preferably immunoglobulins (e.g., antibodies), in which the Fc region comprises at least one amino acid substitution relative to the corresponding amino acid sequence of a wild type Fc region, and which is sufficient to attenuate post-translational fucosylation and mediate improved binding to an activating Fc receptor and reduced binding to an inhibitory Fc receptor. The methods of the invention are particularly useful in preventing, treating, or ameliorating one or more symptoms associated with a disease, disorder, or infection where either an enhanced efficacy of effector cell function mediated by FcγR is desired (e.g., cancer, infectious disease) or an inhibited effector cell response mediated by FcγR is desired (e.g., inflammation, autoimmunde disease).

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