FcγRIIb-SPECIFIC Fc ANTIBODY

ABSTRACT

An objective of the present invention is to provide a polypeptide containing an Fc region having maintained or decreased binding activities towards both allotypes of FcγRIIa, types H and R, and having enhanced FcγRIIb-binding activity in comparison with a parent polypeptide; a pharmaceutical composition containing the polypeptide; an agent for treating or preventing immunological inflammatory diseases that includes the pharmaceutical composition; a production method thereof; and a method for maintaining or decreasing binding activities towards both allotypes of FcγRIIa and enhancing the FcγRIIb-binding activity. Specifically, it is found that a polypeptide containing an antibody Fc region that has an alteration of substituting Pro at position 238 (EU numbering) with Asp or Leu at position 328 (EU numbering) with Glu enhances FcγRIIb-binding activity, and maintains or decreases binding activities towards both allotypes of FcγRIIa, types H and R. It is also found that a polypeptide containing an antibody Fc region that contains an alteration of substituting Pro at position 238 (EU numbering) with Asp and several other alterations, enhances FcγRIIb-binding activity, and maintains or decreases binding activities towards both allotypes of FcγRIIa, types H and R.

(No Suitable Figure)