CLAIMS

1. An antibody having a KD(pH5.8)/KD(pH7.4) value, defined as the ratio of KD for an antigen (except for hen egg-white lysozyme) at pH 5.8 and KD for the antigen at pH 7.4, of 2 or higher and 10000 or less, wherein at least one amino acid of the variable region has been substituted with histidine, and wherein the histidine substitution increases the KD(pH5.8)/KD(pH7.4) value as compared to the KD(pH5.8)/KD(pH7.4) value of the antibody before said histidine substitution.

2. The antibody of claim 1, wherein the KD(pH5.8)/KD(pH7.4) value is 10 or higher.

3. The antibody of claim 1, wherein the KD(pH5.8)/KD(pH7.4) value is 40 or higher.

4. The antibody of any one of claims 1 to 3, wherein the antibody dissociates in an endosome from the antigen (except for hen egg-white lysozyme) that has been extracellularly bound to the antibody.

5. The antibody of any one of claims 1 to 4, wherein in the antibody histidine is substituted for at least one amino acid at the position selected from the group consisting of H27, H31, H32, H33, H35, H50, H58, H59, H61, H62, H63, H64, H65, H99, H100b, and H102 in the heavy chain variable region according to the Kabat numbering and L24, L27, L28, L32, L53, L54, L56, L90, L92, and L94 in the light chain variable region according to the Kabat numbering.

6. The antibody of any one of claims 1 to 5, wherein in the antibody histidine is substituted for at least one amino acid at the position selected from the group consisting of H27, H31, H32, H35, and H61 in the heavy chain variable region according to the Kabat numbering.

7. The antibody of any one of claims 1 to 6, wherein the antibody in which at least one amino acid of the variable region has been substituted with histidine retains 10% or more of the antigen-binding activity at pH 7.4 as compared to that of the antibody before histidine substitution.

8. The antibody of any one of claims 1 to 7, wherein the number of amino acids substituted with histidine is one or two.

9. The antibody of any one of claims 1 to 8, wherein the antibody has an antagonistic activity.

10. The antibody of any one of claims 1 to 9, wherein the antibody binds to a membrane antigen or a soluble antigen.

11. The antibody of any one of claims 1 to 10, wherein the antibody binds to an antigen selected from the group consisting of IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-15, IL-31, IL-23, IL-2 receptor, IL-6 receptor, OSM receptor, gp130, IL-5 receptor, CD40, CD4, Fas, osteopontin, CRTH2, CD26, PDGF-D, CD20, monocyte chemotactic factor, CD23, TNF-α, HMGB-1, α4 integrin, ICAM-1, CCR2, CD11a, CD3, IFNγ, BLyS, HLA-DR, TGF-β, CD52, and IL-31 receptor.

12. A pharmaceutical composition comprising the antibody of any one of claims 1 to 11.