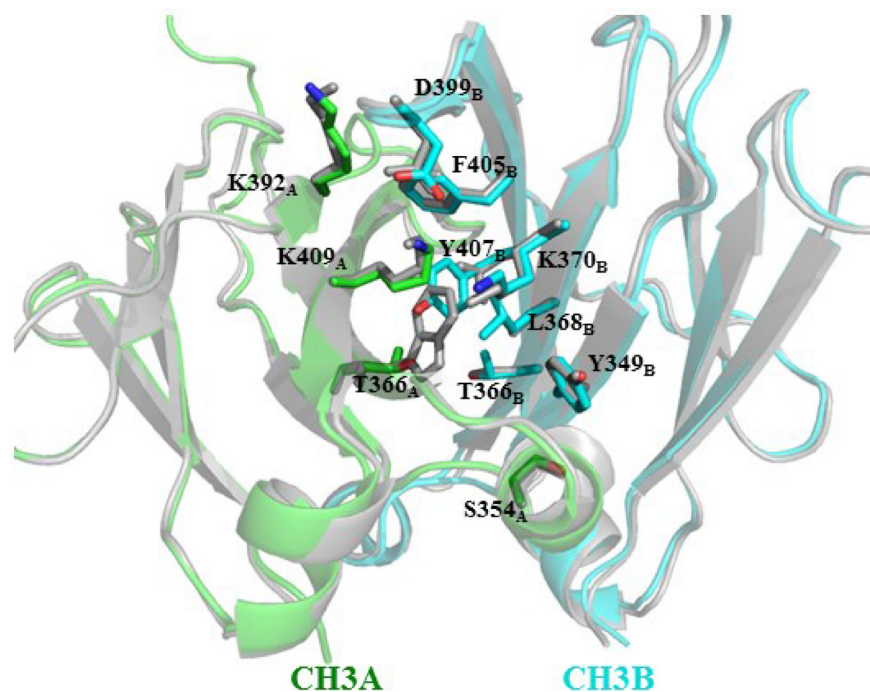
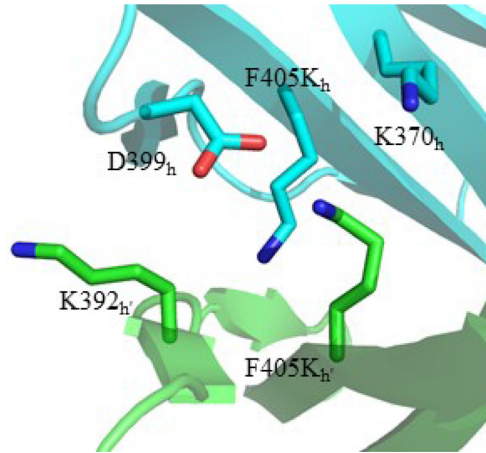


## Structural basis of a novel heterodimeric Fc for bispecific antibody production

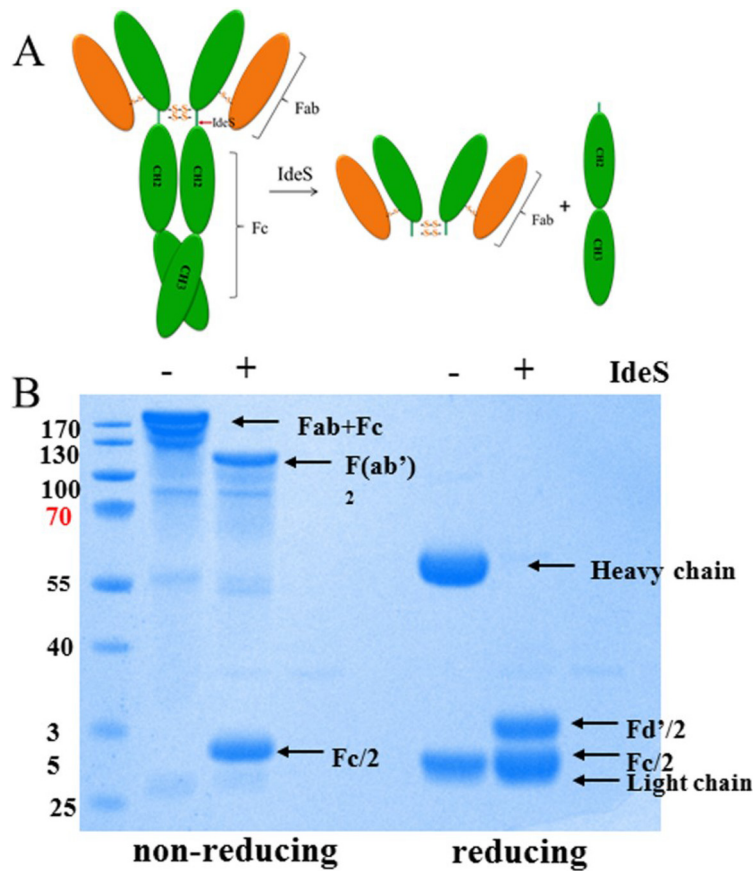
### Supplementary Materials



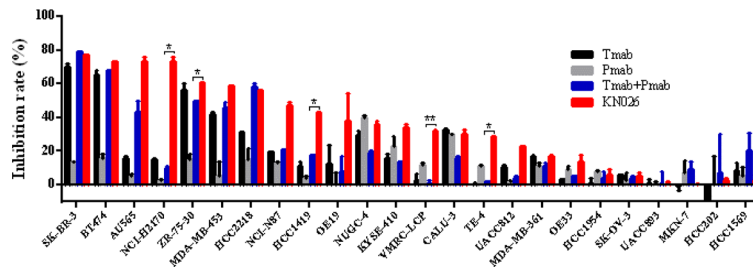
**Supplementary Figure 1:** The structure of CH3 domains of wild-type Fc (PDB: 3AVE) is overlaid with the knob-into-hole Fc variant (knob-T366W, hole-T366S/L368A/Y407V, PDB: 4NQS)(gray). A chain and B chain of wild type are colored by green and cyan, respectively. Key residues of the interface shown in stick.



Supplementary Figure 2: Model of the Structure of hole-hole homodimer of F405K<sub>h</sub> and F405K<sub>h'</sub>, indicating unfavorable interactions for its formation.



Supplementary Figure 3: Process of an antibody with wildtype Fc by streptococcal IgG endopeptidase (IdeS). (A) A cartoon shows the antibody products after IdeS treatment. (B) SDS-PAGE analysis of normal antibody following IdeS treatment under reducing and non-reducing.



**Supplementary Figure 4: The comparison of the inhibitory activity of KN026 and trastuzumab (Tmab) plus pertuzumab (Pmab) on a panel of 24 HER2 expressing cancer cell lines at the concentration of 1 µg/ml. Data are shown as means + SEM. \* $P < 0.05$ , \*\* $P < 0.01$ .**