Anti-EGFR antibody 528 binds to domain III of EGFR at a site shifted from the Cetuximab epitope

Koki Makabe¹, Takeshi Yokoyama^{2,3}, Shiro Uehara², Tomomi Uchikubo-kamo³, Mikako Shirouzu³, Kouki Kimura⁴, Kohei Tsumoto^{5, 6}, Ryutaro Asano⁴, Yoshikazu Tanaka², and Izumi Kumagai^{*,4}

¹Graduate School of Science and Engineering, Faculty of Engineering, Yamagata University, 4-3-16 Jonan, Yonezawa 992-8510, Japan

²Graduate School of Life Sciences, Tohoku University, 2-1-1 Katahira, Aoba-ku, Sendai 980-8577, Japan

³Laboratory for Protein Functional and Structural Biology, RIKEN Center for Biosystems Dynamics Research, Tsurumi-ku, Yokohama 230-0045, Japan

⁴Department of Biotechnology and Life Science, Graduate School of Engineering, Tokyo University of Agriculture and Technology, 2-24-16 Nakacho, Koganei, Tokyo 184-8588, Japan ⁵School of Engineering, The University of Tokyo, 7-3-1, Hongo, Bunkyo-ku, Tokyo 113-8656, Japan

⁶The Institute of Medical Science, The University of Tokyo, 4-6-1, Shirokanedai, Minato-ku, Tokyo 108-8639, Japan

*To whom correspondence should be addressed: kmiz@kuma.che.tohoku.ac.jp



Supplementary Figure 1 Purification of 528b Fab-bound EGFR using gel filtration chromatography. (A) Chromatogram of SEC with Superdex 200 10/300 GL. (B) SDS-PAGE of the peak of SEC. As a reference, purified ECD and 528bFab were also loaded. A marker lane is shown for clarity.