

instruction manual and then equilibrated with an acetate buffer (pH 5.0). Note that the flow rate on and after equilibration step was set to be 109 LMH. After equilibration, the activated carbon material load in the case of Mab B was loaded at a volume of about 300 L/m²; whereas, in the case of Mab A, the solution was loaded at a volume of about 117 L/m², and passed through. Thereafter, Mab B and Mab A were recovered with an acetate buffer (activated carbon material pool).

[0089]

The purification conditions (Table 4), antibody recovery rates (Table 5), HCP clearances (Table 6), PLBL2 clearances (Table 7), and HMWS/LMWS clearances (Table 8) of individual antibodies are shown. In any one of the antibodies, the levels of HCP and PLBL2 were reduced by activated carbon filtration. Also it was confirmed that the contents of HMWS and LMWS were decreased and the content of a monomer was increased. In particular, the level of HCP was significantly reduced by activated carbon filtration (in Example 2, the removal rate of HCP in AEX chromatography was low and HCP loaded on CEX chromatography was not reduced). It was further found that the level of PLBL2 reported as a hitchhiker HCP, which is not easily reduced in accordance with a general antibody purification flow because it interacts with an antibody (International Publication No. WO2015/038888), can be reduced by activated carbon