Figure S1

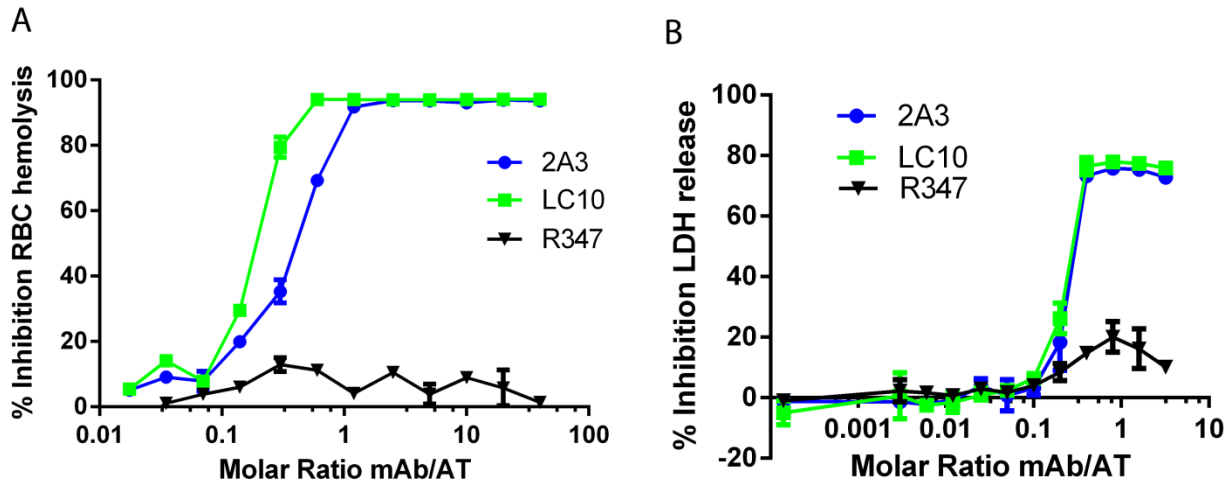

Figure S1. LC10 neutralizes AT-mediated red blood cell and A549 cell lysis with similar potency as 2A3. A. Purified anti-AT mAbs were titrated in a hemolytic assay in the presence of constant quantities of nAT and rabbit RBC. Hemolysis was measured by the hemoglobin release into the supernatant. % hemolysis inhibition was calculated: % inhibition = 100 - [100 x ((A_{450} nAT+ Ab) /(A_{450} nAT no Ab))]. **B.** Purified anti-AT mAbs were titrated in a cytolytic assay in the presence of constant quantities of nAT and A549 cells (alveolar epithelial cell line). Lysis was measured by release of lactate dehydrogenase (LDH) into the supernatant. % lysis inhibition was calculated: % inhibition = 100 – [100 x ((A_{590} nAT+ mAb) /(A_{590} nAT no mAb))].

Figure S2

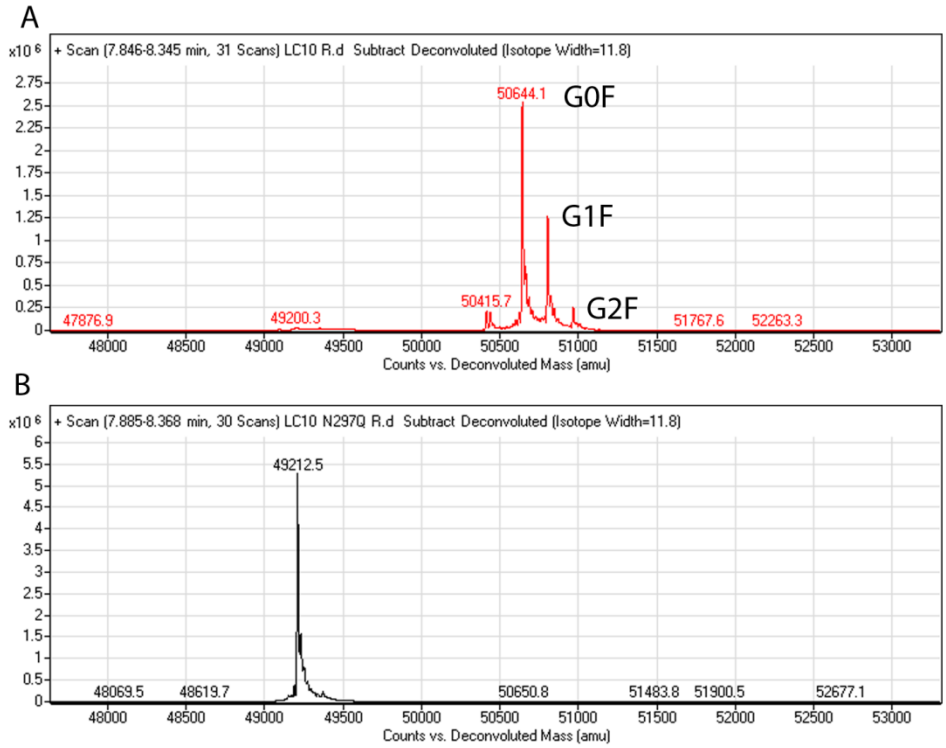

Figure S2. LC10$_{N297Q}$ heavy chain is aglycosylated. LC10 and LC10$_{N297Q}$ (10 □g) were diluted to 1 mg/ml in PBS and incubated with 50 mM DTT (final concentration) for 30 minutes at 37°C. Reduced samples were injected onto a 50 x 2.1mm PRLP-S polymer column (8□m, 1000A, Agilent Technology) and separated by a 25-50% linear acetonitrile gradient in 0.05% trifluoroacetic acid (TFA) and water. Eluted proteins were monitored at 280nm wavelength and intact mass of each peak was identified by Time-of-Flight (TOF) mass spectrometer (6210 TOF LC/MS, Agilent Technology) with a dual-nebulizer electrospray ion source. Data were collected by the Agilent MassHunter Work station data acquisition software and deconvoluted with Agilent MassHunter Qualitative Analysis Software. **A.** Heavy chain mass spectrum of LC10 demonstrated the protein was predominantly glycosylated with G0F, G1F and G2F glycans. **B.** LC10$_{N297Q}$ heavy chain mass spectrum showed the protein was predominantly aglycosylated.

Figure S3

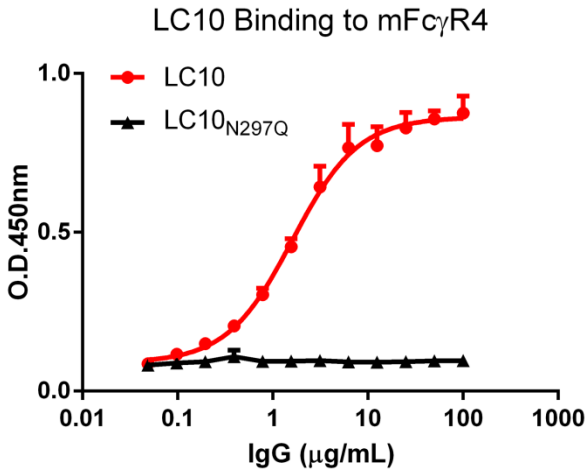

Figure S3. $LC10_{N297Q}$ is defective for binding to murine FcγRIV (mFcγRIV). $LC10_{N297Q}$ binding to a mouse activating Fcγ receptor, mFcγRIV was assessed by ELISA. Murine FcγRIV (100 μg/mL) was coated on 96-well ELISA plate and blocked with 3% BSA in PBS. The plate was then incubated with 2-fold serial dilutions (100 μg/mL to 0.05 μg/mL) of either LC10 or $LC10_{N297Q}$. Antibody binding was detected with a horseradish peroxidase conjugated goat anti-human kappa light chain IgG (1:5,000). LC10 binds to FcγRIV in a concentration dependent manner however $LC10_{N297Q}$ exhibits no binding over the concentration range tested.