We revisit the lower bound on binary tidal deformability imposed by a bright kilonova/macronova, AT 2017gfo, by numerical-relativity simulations of models consistent with gravitational waves from the binary-neutron-star merger, GW170817. Contrary to the claim made in the literature, we find that binaries with the binary tidal deformability less than 400 are capable of explaining AT 2017gfo as far as moderate mass ejection from the remnant is assumed as also done in the previous work. The reason is that the maximum mass of a neutron star is not strongly correlated with tidal deformability of neutron stars with typical mass of 1.4 Solar Mass. If the maximum mass is so large that the binary does not collapse to a black hole immediately after merger, the mass of the ejecta can be sufficiently large irrespective of the binary tidal deformability. We explicitly present models of binary mergers with the binary tidal deformability down to 242 that satisfy the requirement on the mass of the ejecta from AT 2017gfo. We further find that AT 2017gfo could even be explained by models that do not experience bounce after merger if binaries are asymmetric and the threshold mass of the ejecta is taken from detailed radiation-transfer simulations. Accurate estimation of the mass ratio will be necessary to put a lower bound using electromagnetic counterparts in the future. We also caution that merger simulations performed employing a limited class of tabulated equations of state could be severely biased due to the insufficient coverage of the possible parameter space of nuclear theory.