

Abstract

Pharmaceutical compositions comprising antibody-urease conjugates and substantially free of unconjugated urease are disclosed. Specifically, the antibody-urease conjugates comprise an antibody that has specificity to a tumor antigen expressed by non-small cell lung carcinoma, such as CEACAM6. These compositions are prepared by a method that does not require chromatographic purification and comprises: (1) combining the activated antibody and urease in a solvent and (2) increasing the pH of the mixture of (1) such that the activated antibody readily react with the urease to form the antibody-urease conjugate. These pharmaceutical compositions have utility in the treatment of cancer by antibody-directed enzyme prodrug therapy wherein the urease converts endogenous urea into ammonia in situ to induce cytotoxicity.