



Abstract of the Disclosure

A method for radiolabeling a protein with a radioisotope of technetium or rhenium comprises the steps of contacting a solution of a protein containing a plurality of adjacent free sulfhydryl groups, or in particular cases, intact protein containing at least one disulfide group, with stannous ions, and then with radiopertech-netate or radioperrhenate, the amount of stannous ion being sufficient to substantially completely reduce the radiopertech-netate or radioperrhenate, and recovering radiolabeled protein.