Enzyme has been suggested as anote for initiation of synthetic polymerization in yeast. In vitro experiments have been carried out on yeast with a purified enzyme from yeast. It has been found that the enzyme is active at low concentrations of monomer and that the rate of polymerization increases with increasing concentration of enzyme. The results suggest that this enzyme might be involved in the process of polymerization, and that it could be a useful tool for studying the initiation of polymerization in yeast.