



Fig. 1. Effects of temperature on reduction. Initial concentration of rubeomycin A is 100  $\mu\text{g}/\text{ml}$ . The pH value of reaction mixture is 7.0.

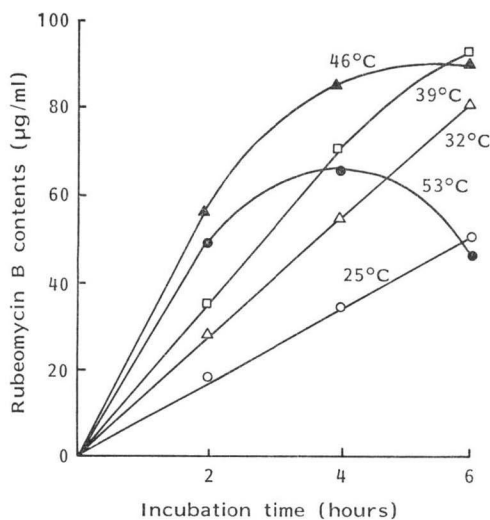
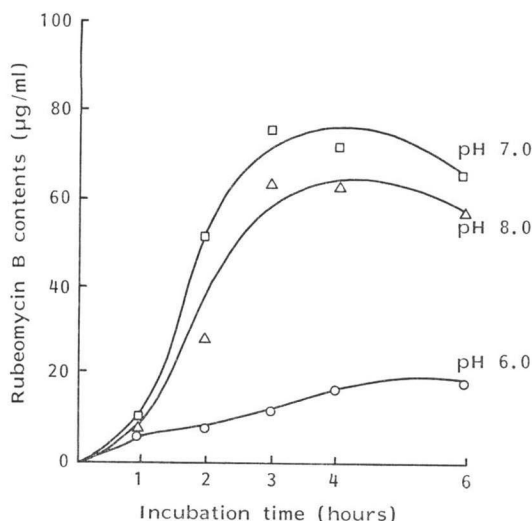


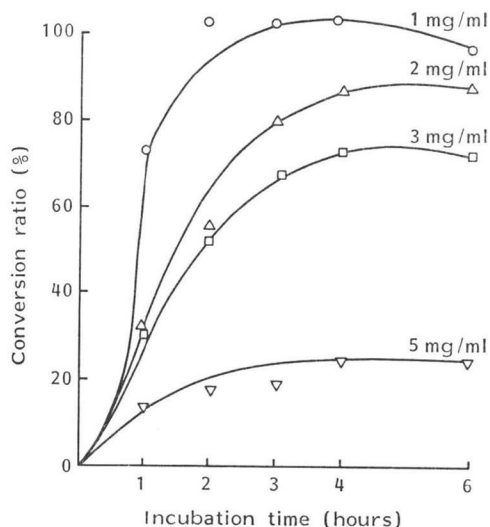
Fig. 2. Effects of pH on reduction. Initial concentration of rubeomycin A is 100  $\mu\text{g}/\text{ml}$ . Incubation temperature is 35°C.



incubation, the reaction mixture was poured into an equal volume of acetone to stop the enzyme reaction. The centrifuged supernatant of the above mentioned reaction mixture was analyzed by HPLC (Water's HPLC System; column: Radialpak B; solvent: chloroform - methanol - acetic acid - water - triethylamine (70:16:10:4:0.01); detector: Shimadzu Fluorescence Spec-

Fig. 3. Recovery of rubeomycin B from the reaction mixture of different initial concentrations of rubeomycin A.

The pH value of reaction mixture is 7.0. Incubation temperature is 35°C.



tromonitor RF-530, emission: 538 nm, excitation: 468 nm) to determine the quantities of rubeomycin A and rubeomycin B.

The experimental results are summarized in Figs. 1, 2 and 3. The optimum pH and temperature for this reduction was pH 7.0~8.0 and 30~40°C, respectively.

As shown in Fig. 3, in the cases of dosages of less than 30 mg in 10 ml of reaction mixture, more than 70% of the added rubeomycin A was transformed to the rubeomycin B reduction product after 4 hours incubation.

The NMR spectrum and other chemical properties of the obtained reduction compound were in fair agreement with those of authentic rubeomycin B that had been previously reported<sup>7)</sup>.

Rubeomycin A<sub>1</sub> was also converted to rubeomycin B<sub>1</sub>.

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