

Studies on the mechanism of metabolic regulation in salt-tolerant yeast  
(Riboflavin production by salt-tolerant yeast for miso fermentation)

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#### Summary

The color of miso changes to dark with time after production, which makes miso difficult to be sold. To prevent the change of color and to improve its brightness, riboflavin (vitamin B<sub>2</sub>), a yellow compound, has been added to miso. However, the consumers generally dislike products with additives. Thus, it was planned to construct a mutant of salt-tolerant yeast for miso fermentation with productivity of riboflavin. By using such kind of yeast, production of miso with bright yellow color without the additive can be achieved. In addition, such kind of miso is nutritionally strengthened with high vitamin B<sub>2</sub> content. In the present report, construction of a yellow mutant No.3-3 by the derivation of 5-fluorouracil-resistant mutants is described. Strain No.3-3 formed yellow colony on minimal medium, while the parent strain formed colony with white color.