

[Mutant strains]

Our mutant strains are produced by treatment of zygotes with *N*-methyl-*N*-nitrosourea (MNU), which induces a high frequency of base-substitution mutations in many species. We provide M₂ strains derived from the rice varieties, Kinmaze and Taichung-65, and M₁ strains derived from the rice variety, Nipponbare. All of these strains are non-selected.

Advantages of treating zygotes with MNU

Inhibition of cell competition
by treatment of the zygote at the
single-cell stage → High mutation rate

Inhibition of chimera formation
by treatment of the zygote at the
single-cell stage → Effective detection of mutants

Easily degraded and detoxified
by ultraviolet light or alkali → No residual toxicity

No special equipment is required → Low cost

Reference

Satoh H., H. Matsusaka, T. Kumamaru. Use of *N*-methyl-*N*-nitrosourea treatment of fertilized egg cells for saturation mutagenesis of rice. *Breed. Sci.*60, 475-485 (2010)