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⑨ Miyazaki, I., Asanuma, M., Diaz-Corrales, F.J. and Ogawa, N.: Protective effects of a novel anti-parkinsonian agent zonisamide on dopamine quinone-related neurotoxicity. 10th International Congress of Parkinson's Disease and Movement Disorders, Kyoto, 2006, 10, 31.

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H. 知的財産権の出願・登録状況

特許取得

特になし

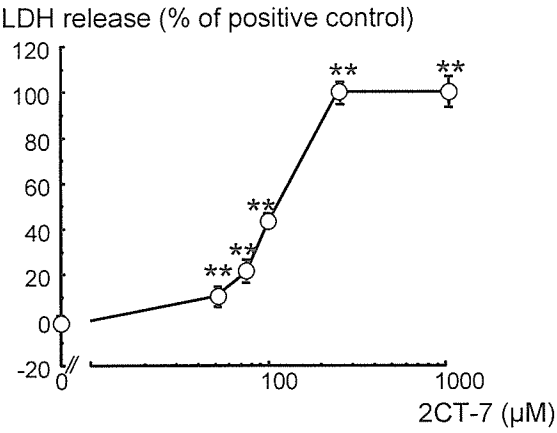
実用新案登録

特になし

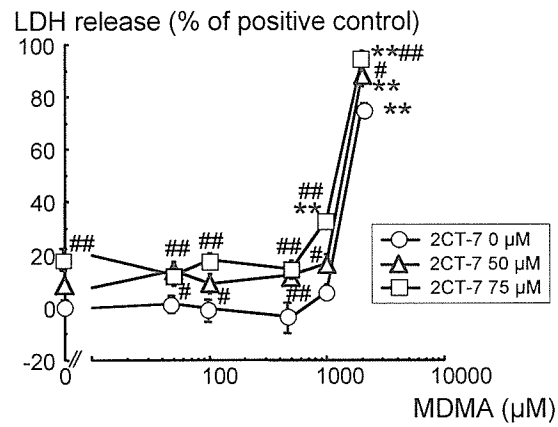
その他

特になし

A CATH.a cells



B CATH.a cells



C CATH.a cells

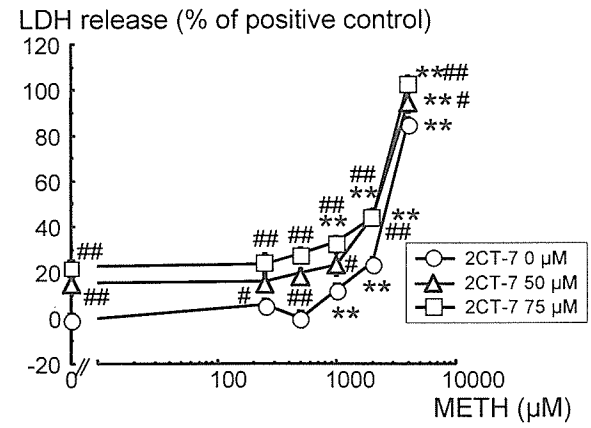


Fig. 1. Changes in released LDH from dopaminergic CATH.a cells after exposure to 2CT-7 (A), 2CT-7+MDMA (B) or 2CT-7+METH (C) for 24 hours. Each value mean ± SEM of released LDH expressed as percentage of Tween-20-treated positive control. **p<0.01 vs. each control group without MDMA or METH. #p<0.05, ##p<0.01 vs. MDMA/METH-dose-matched control group without 2CT-7.

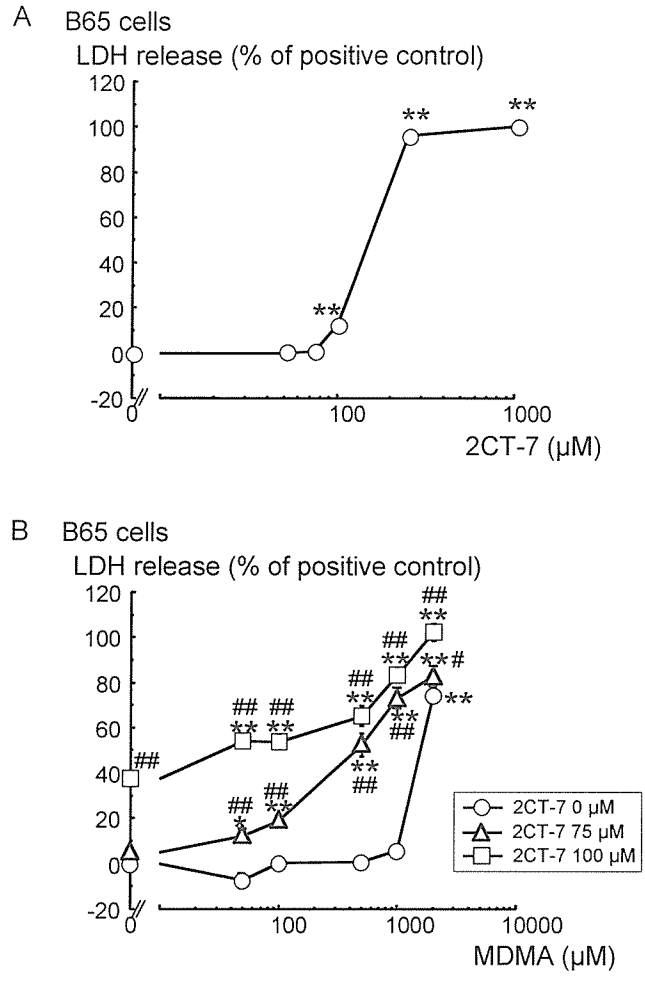


Fig. 2. Changes in released LDH from dopaminergic B65 cells after exposure to 2CT-7 (A), 2CT-7+MDMA (B) or 2CT-7+METH (C) for 24 hours. Each value mean ± SEM of released LDH expressed as percentage of Tween-20-treated positive control. *p<0.05, **p<0.01 vs. each control group without MDMA or METH. #p<0.05, ##p<0.01 vs. MDMA/METH-dose-matched control group without 2CT-7.

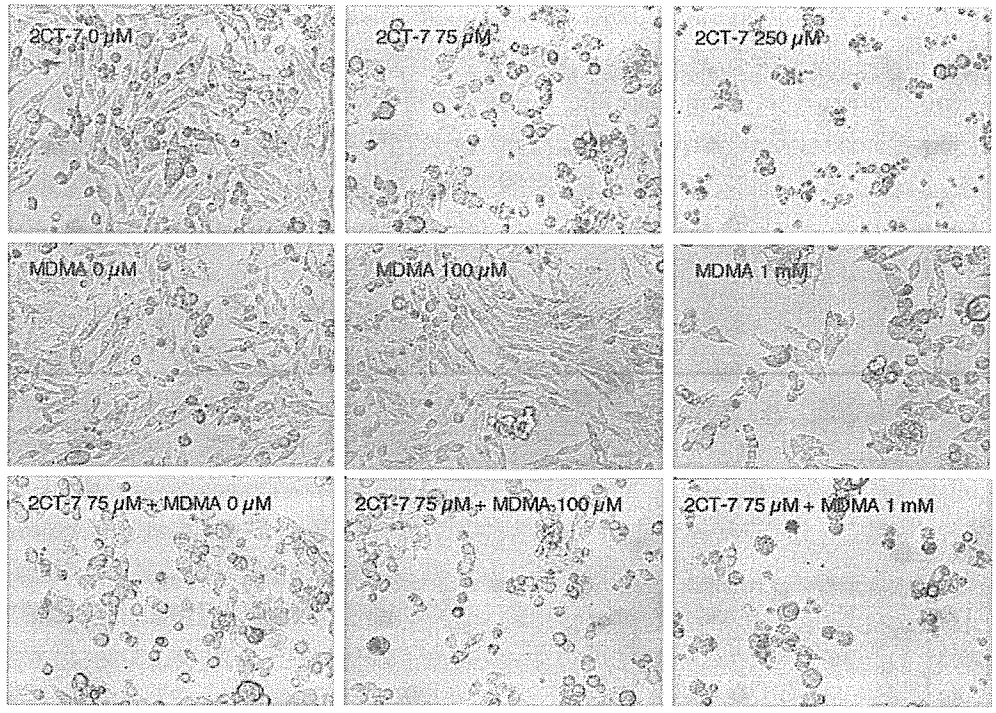


Fig. 3. Photographs of B65 cells treated with 2CT-7 and/or MDMA (final concentration: 0, 100 μM, 1 mM) for 24 hours.

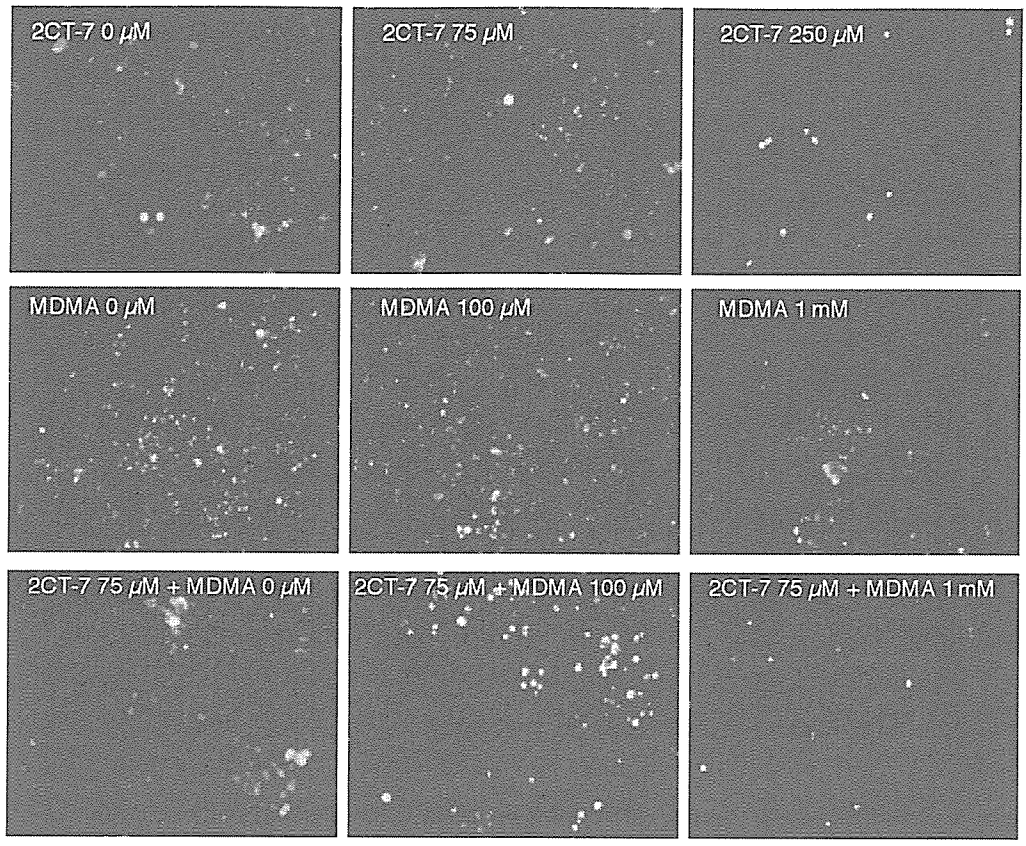


Fig. 4. Nuclear staining of B65 cells treated with 2CT-7 and/or MDMA (final concentration: 0, 100 μM, 1 mM) for 24 hours. Nuclei were visualized by incubation with Hoechst33342 dye.

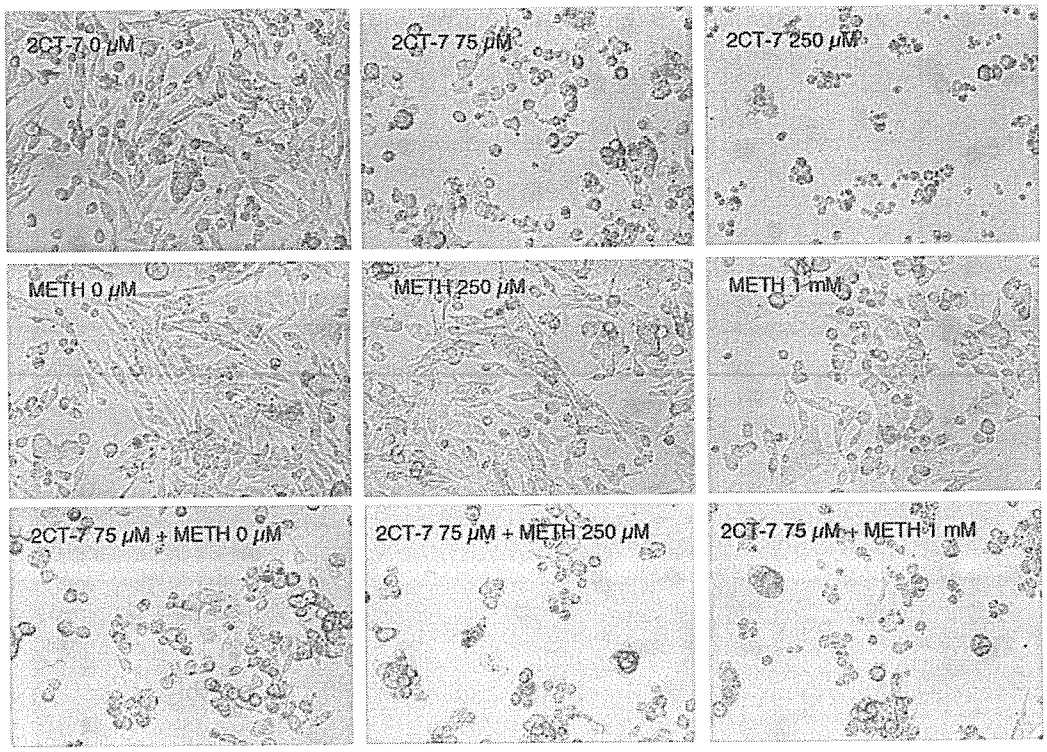


Fig. 5. Photographs of B65 cells treated with 2CT-7 and/or METH (final concentration: 0, 250 μM, 1 mM) for 24 hours.

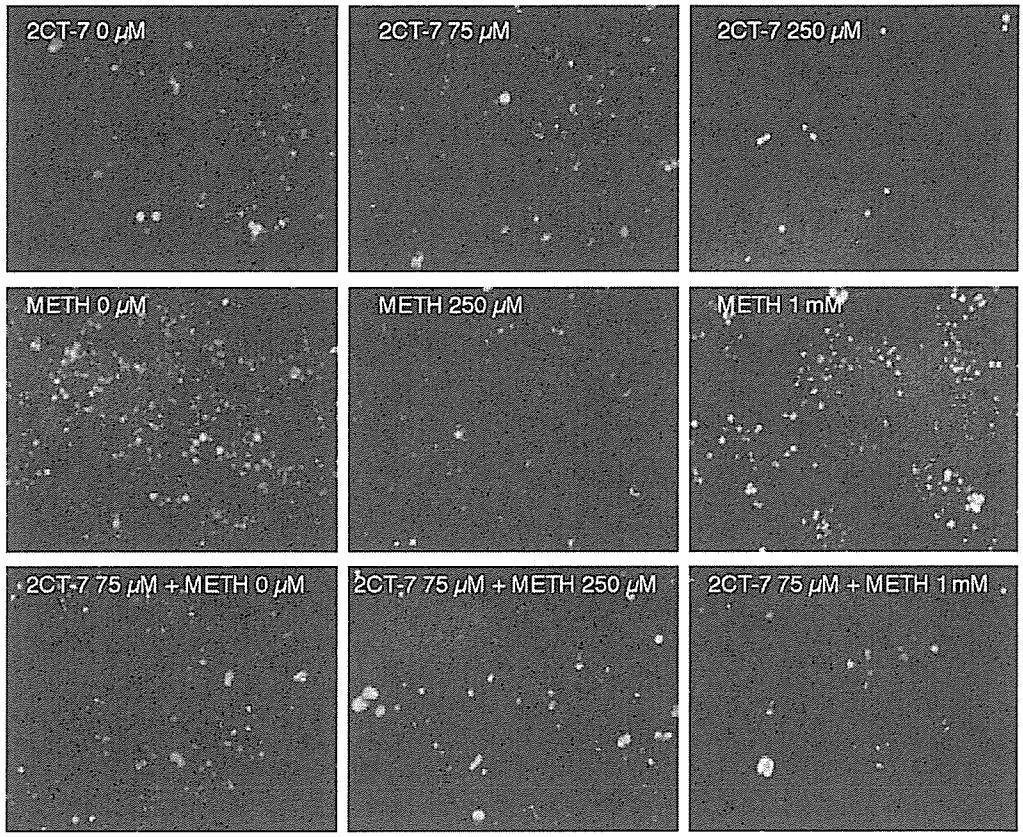
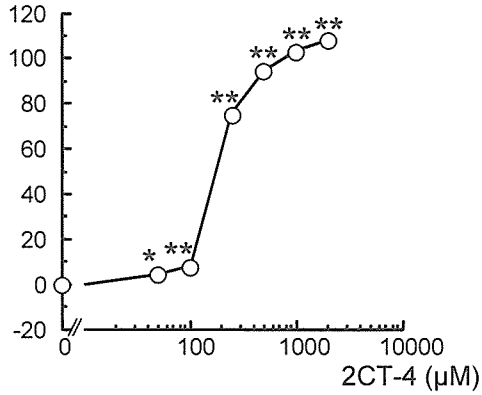


Fig. 6. Nuclear staining of B65 cells treated with 2CT-7 and/or METH (final concentration: 0, 250 μM, 1 mM) for 24 hours. Nuclei were visualized by incubation with Hoechst33342 dye.

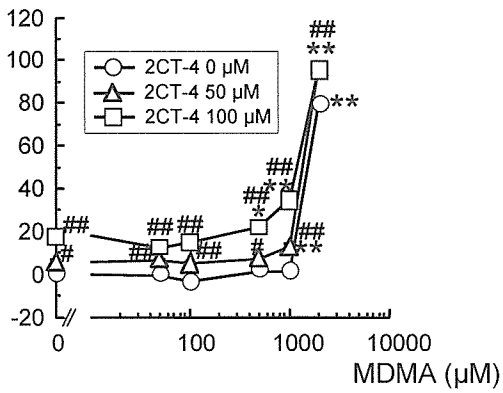
A CATH.a cells

LDH release (% of positive control)



B CATH.a cells

LDH release (% of positive control)



C CATH.a cells

LDH release (% of positive control)

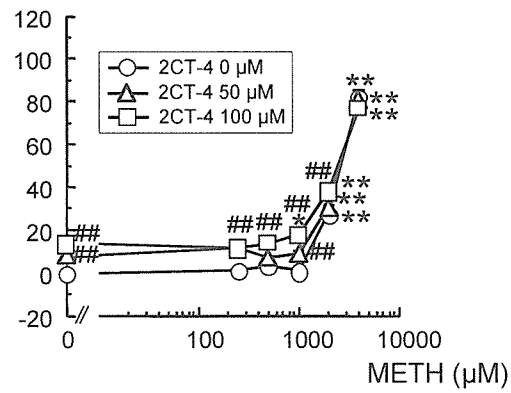
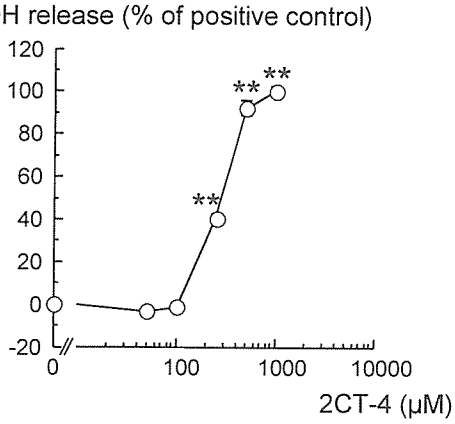
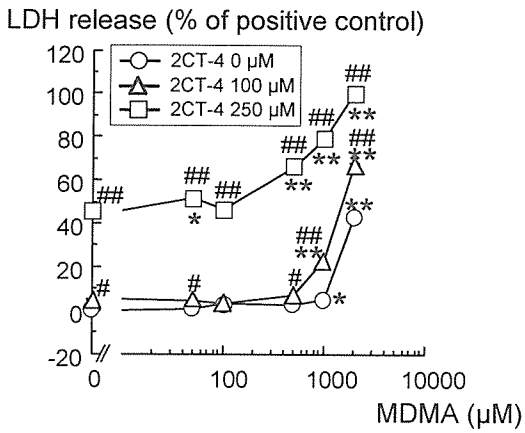


Fig. 7. Changes in released LDH from dopaminergic CATH.a cells after exposure to 2CT-4 (A), 2CT-4+MDMA (B) or 2CT-4+METH (C) for 24 hours. Each value mean ± SEM of released LDH expressed as percentage of Tween-20-treated positive control. *p<0.05, **p<0.001 vs. each control group without MDMA or METH. #p<0.01, ##p<0.001 vs. MDMA/METH-dose-matched control group without 2CT-4.

A B65 cells



B B65 cells



C B65 cells

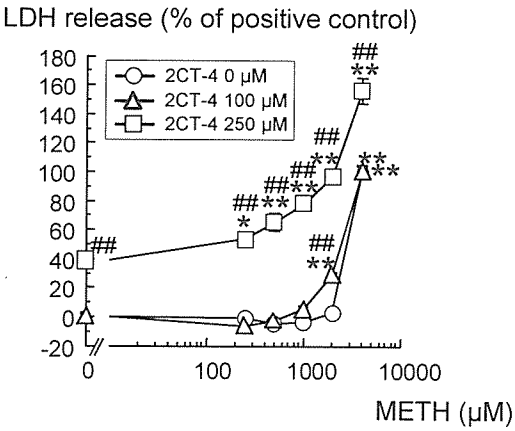


Fig. 8. Changes in released LDH from dopaminergic B65 cells after exposure to 2CT-4 (A), 2CT-4+MDMA (B) or 2CT-4+METH (C) for 24 hours. Each value mean ± SEM of released LDH expressed as percentage of Tween-20-treated positive control. *p<0.05, **p<0.001 vs. each control group without MDMA or METH. #p<0.05, ##p<0.001 vs. MDMA/METH-dose-matched control group without 2CT-4.

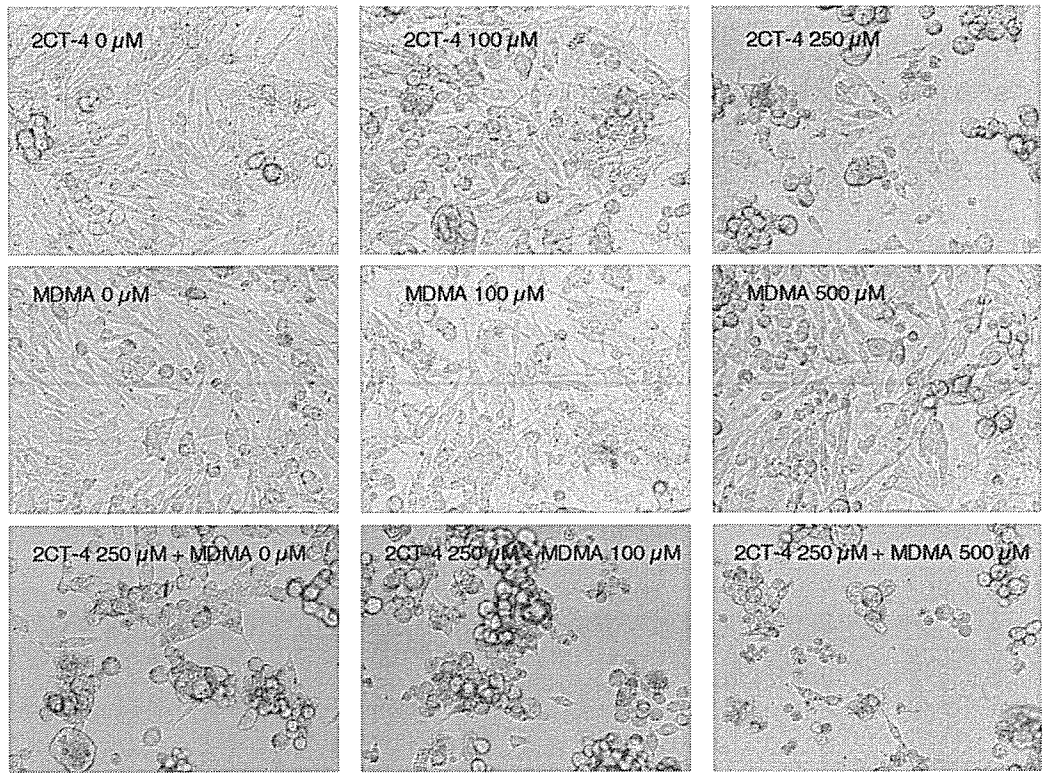


Fig. 9. Photographs of B65 cells treated with 2CT-4 and/or MDMA (final concentration: 0, 100 μM, 500 μM) for 24 hours.

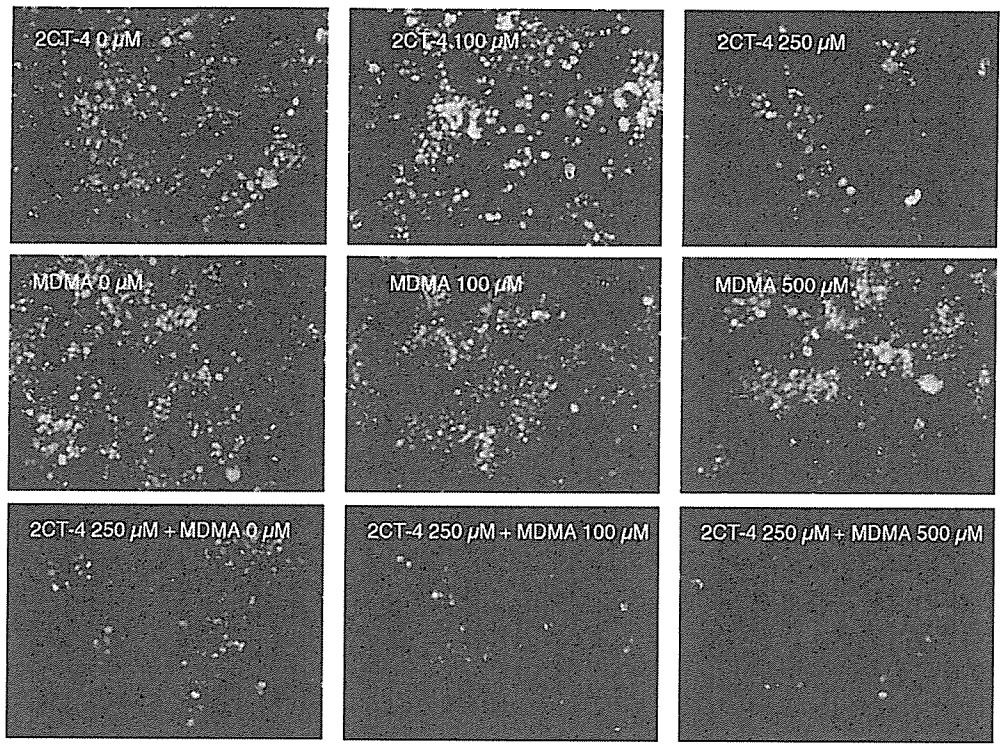


Fig. 10. Nuclear staining of B65 cells treated with 2CT-4 and/or MDMA (final concentration: 0, 100 μM, 500 μM) for 24 hours. Nuclei were visualized by incubation with Hoechst33342 dye.

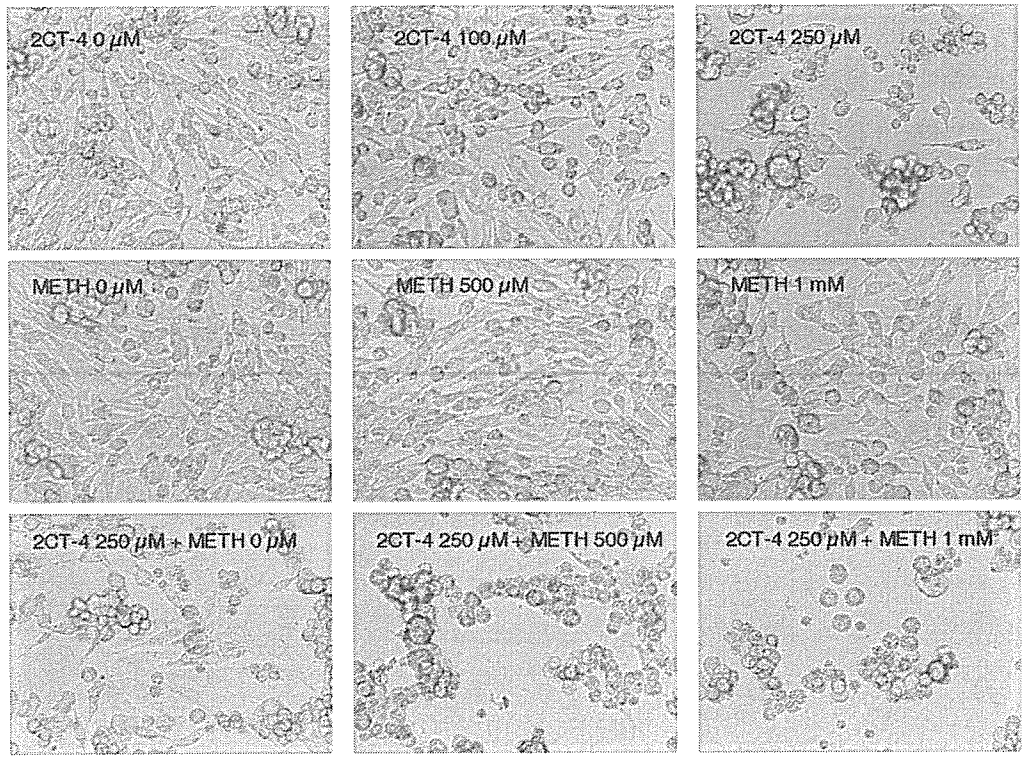


Fig. 11. Photographs of B65 cells treated with 2CT-4 and/or METH (final concentration: 0, 500 μM, 1 mM) for 24 hours.

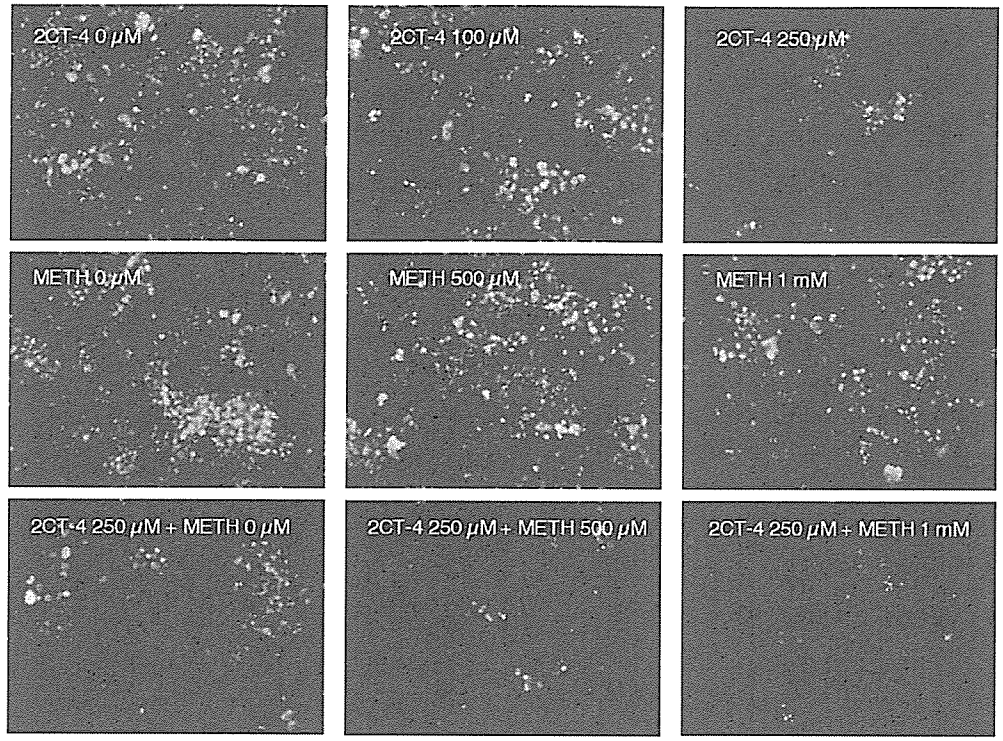
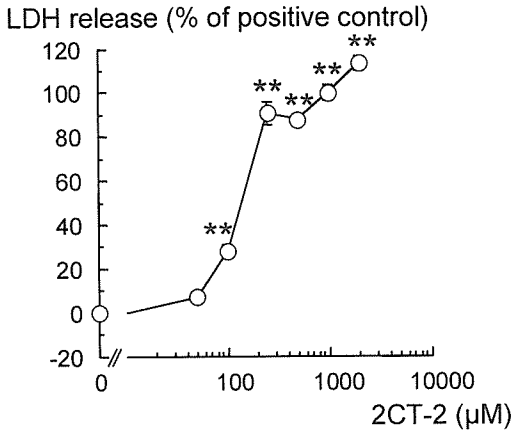
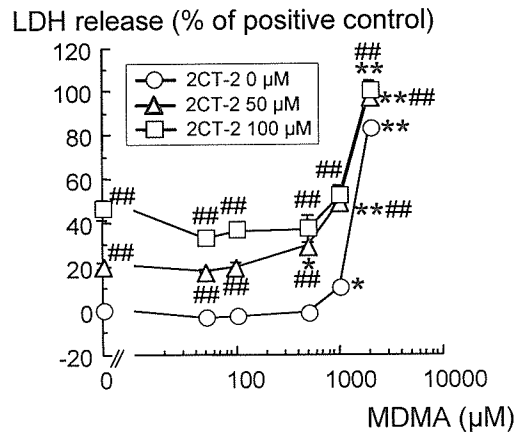


Fig. 12. Nuclear staining of B65 cells treated with 2CT-4 and/or METH (final concentration: 0, 500 μM, 1 mM) for 24 hours. Nuclei were visualized by incubation with Hoechst33342 dye.

A CATH.a cells



B CATH.a cells



C CATH.a cells

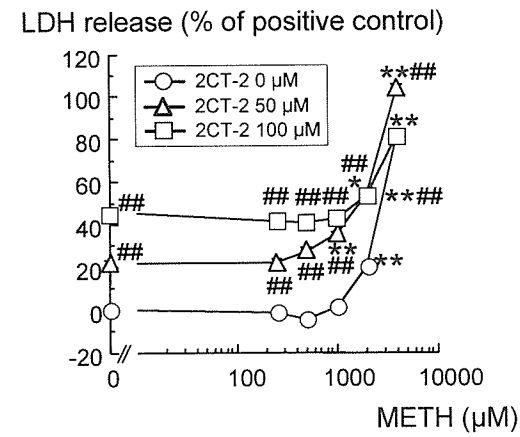
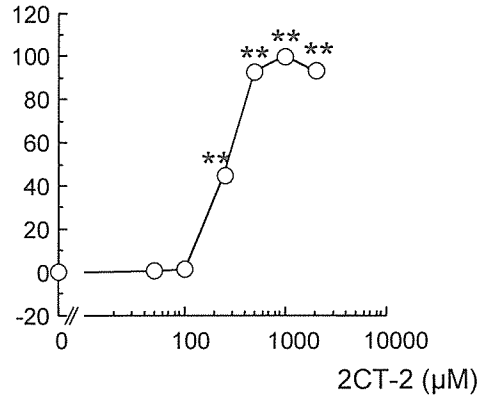


Fig. 13. Changes in released LDH from dopaminergic CATH.a cells after exposure to 2CT-2 (A), 2CT-2+MDMA (B) or 2CT-2+METH (C) for 24 hours. Each value mean ± SEM of released LDH expressed as percentage of Tween-20-treated positive control. *p<0.05, **p<0.001 vs. each control group without MDMA or METH. ##p<0.001 vs. MDMA/METH-dose-matched control group without 2CT-2.

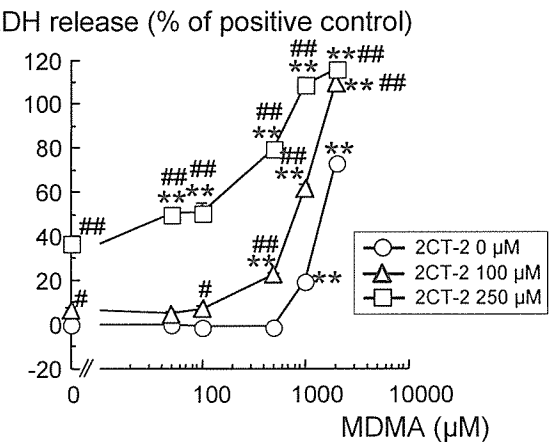
A B65 cells

LDH release (% of positive control)



B B65 cells

LDH release (% of positive control)



C B65 cells

LDH release (% of positive control)

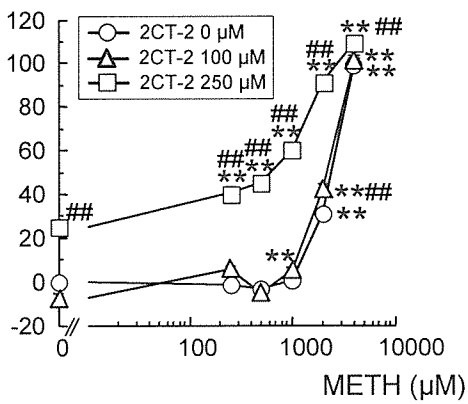


Fig. 14. Changes in released LDH from dopaminergic B65 cells after exposure to 2CT-2 (A), 2CT-2+MDMA (B) or 2CT-2+METH (C) for 24 hours. Each value mean ± SEM of released LDH expressed as percentage of Tween-20-treated positive control. **p<0.001 vs. each control group without MDMA or METH. #p<0.05, ##p<0.001 vs. MDMA/METH-dose-matched control group without 2CT-2.

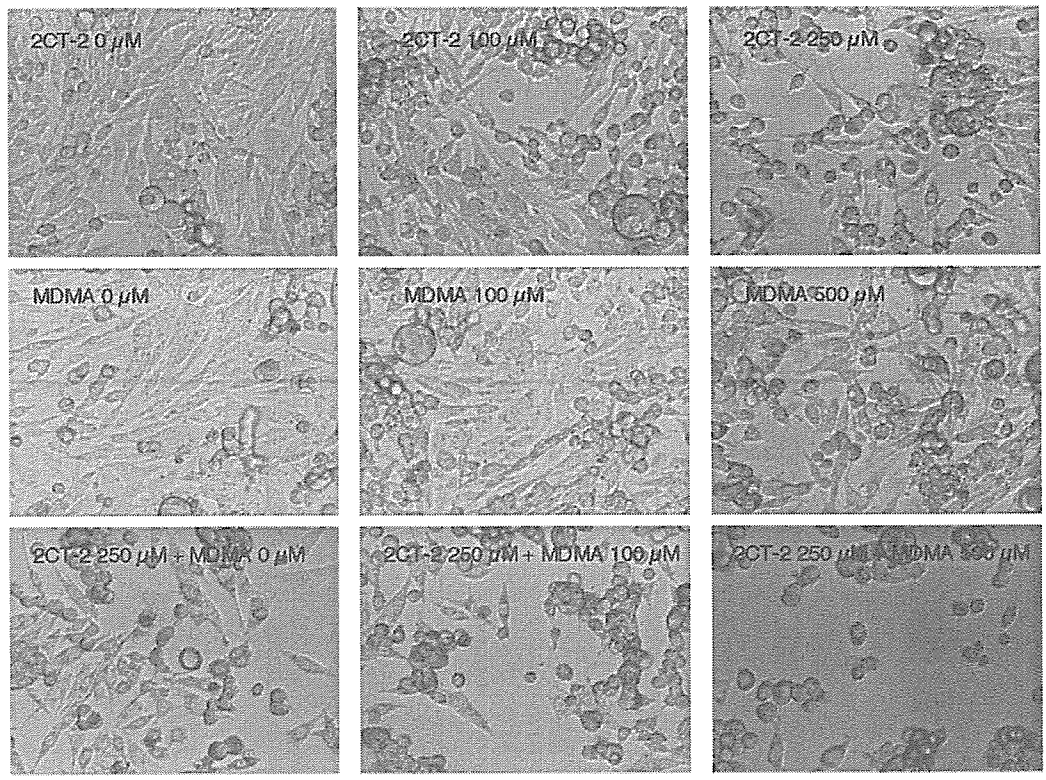


Fig. 15. Photographs of B65 cells treated with 2CT-2 and/or MDMA (final concentration: 0, 100 μM, 500 μM) for 24 hours.

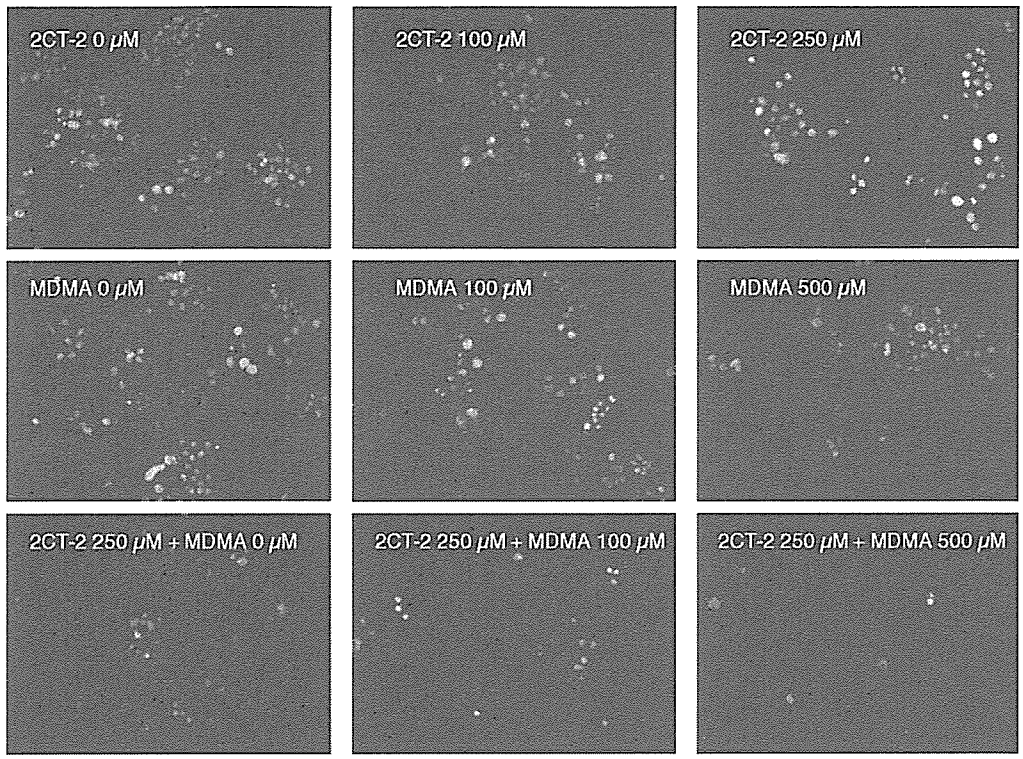


Fig. 16. Nuclear staining of B65 cells treated with 2CT-2 and/or MDMA (final concentration: 0, 100 μM, 500 μM) for 24 hours. Nuclei were visualized by incubation with Hoechst33342 dye.

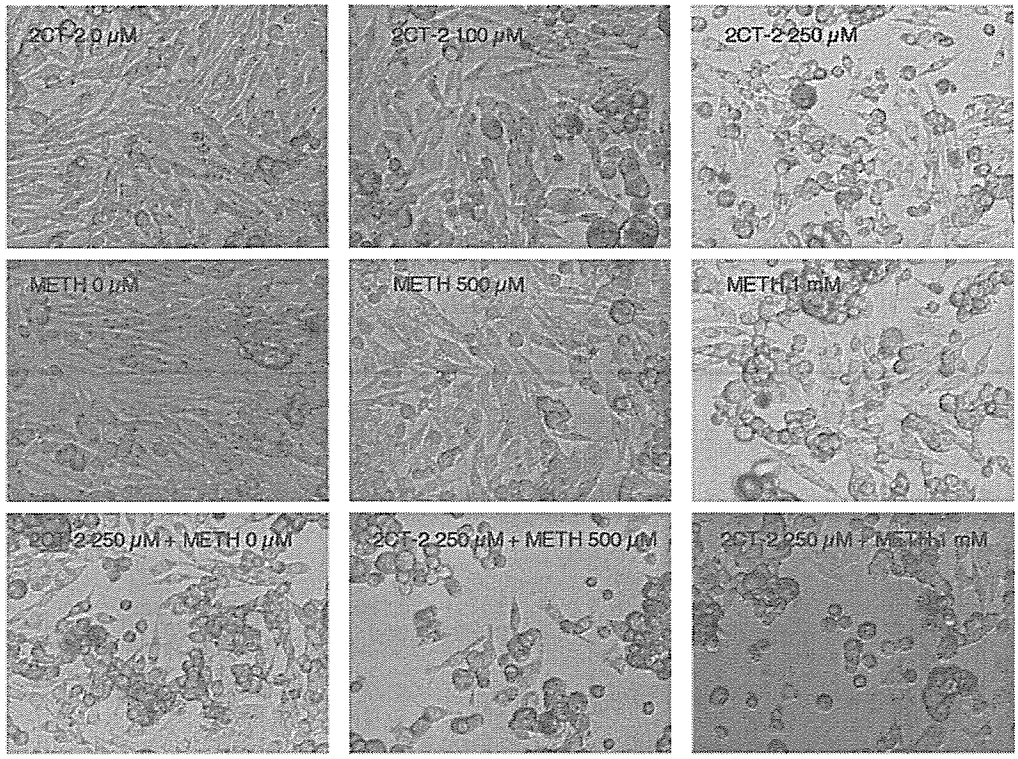


Fig. 17. Photographs of B65 cells treated with 2CT-2 and/or METH (final concentration: 0, 500 μM, 1 mM) for 24 hours.

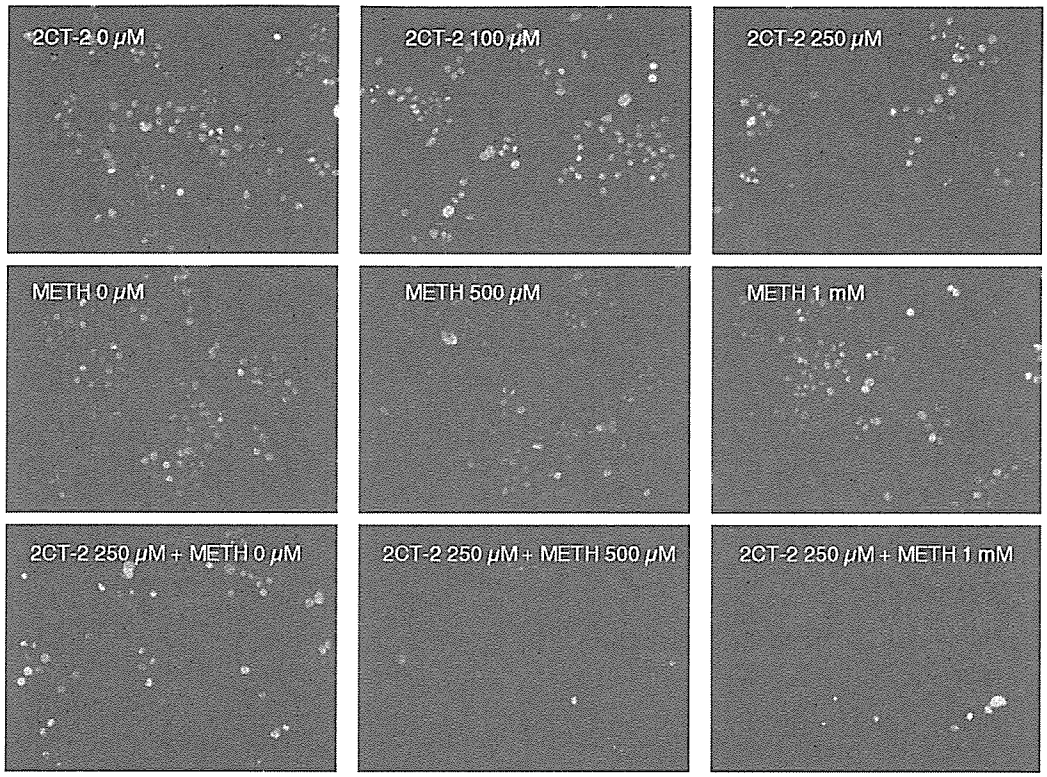
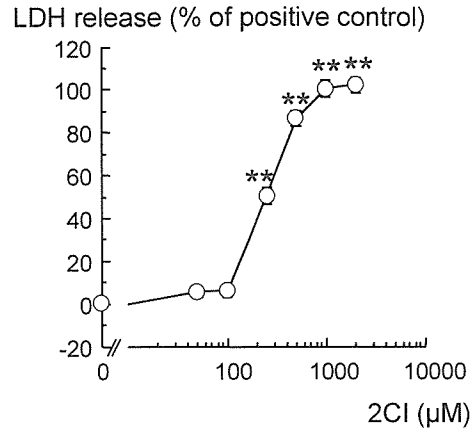
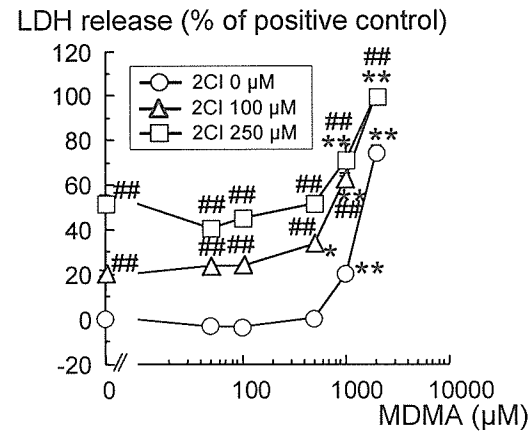


Fig. 18. Nuclear staining of B65 cells treated with 2CT-2 and/or METH (final concentration: 0, 500 μM, 1 mM) for 24 hours. Nuclei were visualized by incubation with Hoechst33342 dye.

A CATH.a cells



B CATH.a cells



C CATH.a cells

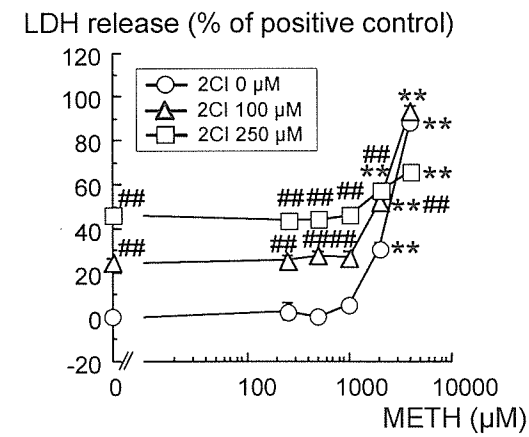


Fig. 19. Changes in released LDH from dopaminergic CATH.a cells after exposure to 2CI (A), 2CI+MDMA (B) or 2CI+METH (C) for 24 hours. Each value mean ± SEM of released LDH expressed as percentage of Tween-20-treated positive control. *p<0.01, **p<0.001 vs. each control group without MDMA or METH. ##p<0.001 vs. MDMA/METH-dose-matched control group without 2CI.