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Luciferase Activity Assay

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Abstract

Luciferase activity assay on cell extracts using Veritas (Turner) luminometer.



- 1 Lysate the cell using 1X Luciferase Cell Culture LysisReagent (Cat. E1531, Promega) following manufacturer instruction;
- 2 prepare Reaction Buffer (100µl for each sample): 500 µM luciferin (Cat E160E, Promega), 20 mM Tricine, 0.1 mM EDTA, 1.07 mM (MgCO₃)₄·Mg(OH)₂, 2.67 mM MgSO₄ in H₂O, pH 7.8, with 33.3 mM DTT and 530 mM ATP.
- 3 put 20 µl/well of cell lysate into the white plate (Cat 3912, Corning);
- 4 turn on the luminometer (Veritas, Turner);
- 5 let the samples' plate and Reaction Buffer equilibrate at room temperature; Insert the plate into the instrument and prime the tube with the Reaction Buffer;
- 6 run the protocol on the luminometer (injection volume 100µl, delay before measurement 0s, integration time 10s)