Validation data for A549-RepTor™ cells

https://www.invivogen.com/tet-on-a549-reptor-cells

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A549-RepTor™ cells are designed for the Tet-on inducible expression of a protein. The absence of expression leakage has been verified in A549-RepTor™ cells transfected with pTiGer plasmids coding for the SEAP (secreted embryonic alkaline phosphatase) or Lucia luciferase reporter proteins (Figure 1). SEAP and Lucia are conditionally expressed by A549-RepTor™ SEAP and A549-RepTor™ Lucia cells upon incubation with Doxycycline (Dox), in a dose-dependent manner (Figure 2).

No expression leakage of protein of interest in A549-RepTor™ cells

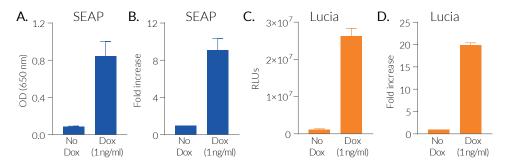


Figure 1: Expression of SEAP or Lucia reporter proteins in transfected A549-RepTor™ cells. A549-RepTor™ cells were transfected with the gene coding for SEAP (secreted embryonic alkaline phosphatase) or Lucia luciferase cloned into a pTiGer plasmid. The cells were then treated or not with Doxycycline (Dox) at 1 ng/ml for 24 hours. (A, B) The SEAP activity in the supernatant of A549-RepTor™ SEAP cells was assessed using QUANTI-Blue™ detection reagent. The data is shown as (A) OD at 650 nm and (B) fold increase (mean +SEM). (C, D) The Lucia activity in the supernatant of A549-RepTor™ Lucia cells was assessed using QUANTI-Luc™ 4 Lucia/Gaussia detection reagent. The data is shown as (C) relative light units (RLUs) and (D) fold increase (mean +SEM).

Inducible SEAP or Lucia expression in A549-RepTor™ cells

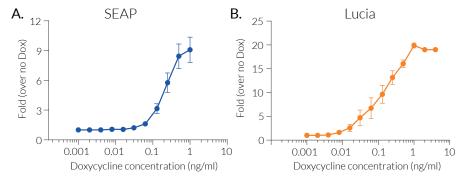


Figure 2: Dose-dependent Doxycycline-mediated expression of SEAP or Lucia in A549-RepTor™ cells. A549-RepTor™ cells were transfected or not with the gene coding for SEAP (secreted embryonic alkaline phosphatase) or Lucia luciferase cloned into a pTiGer plasmid. A549-RepTor™ SEAP cells and A549-RepTor™ Lucia cells were incubated with increasing concentrations of Doxycycline. After 24 hours, the SEAP or Lucia activity in the supernatant was assessed using (A) QUANTI-Blue™ or (B) QUANTI-Luc™ 4 Lucia/Gaussia, respectively. The data is shown as fold induction over no Dox treatment (mean + SEM).

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