

RTMS.e22 Transgenic Mouse Technology in Skin Biology: Inducible Gene Knockout in Mice

QUESTIONS

- 1. What is a possible disadvantage of total-body knockout mice?**
 - A. The researcher induces the knockout.
 - B. The knockout is tissue specific.
 - C. The knockout is embryonic lethal.
- 2. Which of the following statements is incorrect?**
 - A. The tetracycline-responsive transactivator (tTA or rtTA) binds to the promoter of the target gene (knockout).
 - B. The tetracycline-responsive transactivator (tTA or rtTA) binds to the tet Operon (tetO).
 - C. The tetracycline-responsive transactivator (tTA or rtTA) is modulated by Dox.
- 3. Which protein in the cytoplasm binds the estrogen-fusion protein?**
 - A. Hsp70.
 - B. Hsp90.
 - C. BAG-3.
 - D. NEMO.
- 4. What is one potential use for iPSCs?**
 - A. Feeding with tamoxifen food pellets.
 - B. Subcutaneous injections.
 - C. Adding tamoxifen to the drinking water.
 - D. Applying tamoxifen to the skin.
- 5. What needs to be checked after treatment of the mice before further investigation?**
 - A. Check for deletion efficiency of the target gene.
 - B. Check for alterations of related signaling pathways.
 - C. Check the skin of these mice for a phenotype.
 - D. Check for behavioral changes of the mice.

ANSWERS

1. C.
2. A.
3. B.
4. C.
5. A.