Guidelines for the Preparation, Use and Storage of 

Tamoxifen

\((C_{26}H_{29}NO; \text{CAS #} \ 10540-29-1)\)

NOTE: Tamoxifen induction regimens should be determined empirically for the specific mouse lines and experimental setup involved. However, the following protocol provides a starting point for the induction of Cre in adult (P56) mice. The following procedure has been used with success to induce robust Cre activity in all major organ systems (validated in ubiquitous Cre /ER expressers, such as B6.Cg-Tg(UBC-cre/ERT2)1Ejb/J, JR#8085).

MATERIALS AND REAGENTS

- Tamoxifen (Sigma-Aldrich), CAS # 10540-29-1
- Corn Oil
- 70% Ethanol (for disinfection)
- 1 ml Syringe (BD)
- 3/8” beveled needle – 26 gauge (BD)

INSTRUCTIONS

- Dissolve tamoxifen in pharmaceutical grade corn oil at a concentration of 20 mg/ml by shaking overnight at 37°C.
- Tamoxifen is light sensitive and should be made and stored in a light-blocking vessel (amber or foil wrapped).
- After tamoxifen is in solution, tamoxifen should be stored at 4°C for the duration of injections and be labeled with the following:
  - Name of each content
  - Concentration of the final solution
  - Date solution was mixed
- Throughout the course of tamoxifen injections and any post-injection wait period, mice should be closely monitored for any adverse reactions to the treatment.

SPECIAL PRECAUTIONS

Tamoxifen is a hazardous substance. Review the MSDS, wear appropriate PPE.

REFERENCES