

SOLUTIONS FOR TREATING MICE

REAGENTS REQUIRED

4-hydroxytamoxifen (4-HT, Sigma, Cat. No. H6278)
Tamoxifen (Sigma, Cat. No. T5648)
Mifepristone (Sigma, Cat. No. M8046)
Progesterone (Sigma, Cat. P0130)
DMSO
Corn oil – autoclaved

Solutions for Topical Treatment

Make 64.5mM solutions of mifepristone or 4-HT in DMSO

- → 25mg/ml 4-HT
- → 27.7mg/ml mifepristone

Topical treatment of mice for nevi or melanoma development

Treat pups on 3 separate days within the first week of birth (days 2,3,4 work well). Using a designated paintbrush for the drug to be administered (4-HT or mifepristone), lightly paint the pup's right ear, flank, and entire tail. Pay attention to not get any drug on your gloves as this will facilitate transfer the drug to

Solutions for injection

Make up a 10mg/ml solution of tamoxifen in corn oil. Make the solution in a 50mL falcon tube and mix with rotating/rocking at 4°C overnight.

One hundred milligrams of mifepristone was first dissolved in $700\mu L$ DMSO before being suspended in 20mL sterile corn oil to produce a 4.84 mg/mL solution. Two hundred milligrams of progesterone was dissolved in 40mL sterile corn oil to produce a 5mg/mL solution.

Pre-make and aliquot solutions (~1.5mL per sterile tube) and store at -80°C.

Treating embryos in utero

Inject 2mg tamoxifen per 40g mouse weight.