

*In Vivo* Preclinical Imaging

# PROTOCOL:

## *In Vivo* Imaging Protocol with RediJect D-Luciferin

### XenoLight RediJect D-Luciferin

<b>Part Number</b>	770504
<b>Properties</b>	Yellow Colored Solution (D-Luciferin Potassium Salt in PBS)
<b>Concentration</b>	10 Sterile Vials Each Containing 850 µl of 30 mg/ml D-Luciferin
<b>Storage and Handling</b>	Store Below -70 °C. Repeated Freeze Thaw is Not Recommended.

- Just before your experiment, remove a vial from the kit and place it in a 37 °C water bath for five minutes. Vortex the tube for one minute and it is ready to use.
- For *in vivo* imaging studies, we recommend injection of RediJect D-Luciferin at 150 mg/kg (150 µl/mouse injection\*) using a 25 gauge needle, usually with 1 cc syringe. Injections can be performed intraperitoneally, subcutaneously or intravenously.

- A Luciferin kinetic curve should be performed for each new animal model to determine signal plateau duration. **Please see our 'Determining the Luciferin Kinetic Curve for Your Model' instruction sheet available for download on our website.**
- Once plateau is determined, allow D-Luciferin to distribute in animals under conditions consistent with those the animals were under during kinetic curve generation, i.e. under anesthesia and warmed to 37 °C.
- Place fully anesthetized animals in the IVIS imaging system and perform bioluminescence imaging..

\* Calculations based on a 30 g mouse