1.0 Purpose

The purpose of SOP 4.27 is to provide information on proper procedure for preparing luciferin to be used for live imaging in vitro and in vivo.

2.0 Scope

SOP 4.27 is intended to cover all resources, personnel and equipment in the BCR laboratory.

3.0 Materials

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Luciferease</td>
<td>1 g from Regis Tech., cat# 360222</td>
<td>Fridge #1 (026-328S)</td>
</tr>
<tr>
<td>2.0</td>
<td>PBS 1X</td>
<td>Gibco # 10010-023</td>
<td>Walk-in cold room, B026-380C</td>
</tr>
<tr>
<td>3.0</td>
<td>Steriflip</td>
<td>50 mL .22 uM filter, Millipore cat# SCGP00525</td>
<td>320S-A</td>
</tr>
</tbody>
</table>

4.0 Procedure - PREPARE IN THE DARK, LIGHT SENSITIVE!

4.1 Dissolve 1 gram of yellow luciferin powder in 33.3 mL of 1X PBS, by adding 33.3 mL of PBS to the luciferin amber bottle, for final stock concentration of 30 mg/mL. Mix well.

4.2 Filter through a 50 mL .22 uM filter Steriflip.

4.3 Aliquot 1.5 mL into sterile amber 1.7 mL eppendorf tubes and store aliquots in freezer #2 in luciferin aliquot box in the metal rack.

5.0 Applicable References

6.0 Change Description