LUXOL FAST BLUE, CRESYL VIOLET

**Acetic Acid Solution, 10%**

- Acetic acid, glacial: 10ml
- Distilled water: 90ml

**Luxol fast blue**

- Luxol fast blue: 0.1g
- 95% Ethanol: 100ml
- 10% acetic acid: 0.5ml

Dissolve the dye in alcohol, then add 10% acetic acid, filter; the solution is stable.

**Cresyl violet 0.1%**

- Cyresyl violet: 0.1g
- Distilled water: 100ml

Just before use, add 15 drops of 10% acetic acid solution, filter, and preheat.
This solution is not very stable, so do not prepare a large amount.

**Lithium Carbonate Solution, 0.05%**

- Lithium carbonate: 0.25g
- Distilled water: 500ml

1. Deparaffinize (xylene substitute) sections and hydrate to 95% alcohol.
2. Stain in Luxol Fast Blue solution at 57°C overnight.
3. Wash in 95% alcohol.
4. Wash in distilled water.
5. Differentiate in saturated lithium carbonate solution. (3min.)
6. Continue the differentiation in 70% alcohol solution until the grey and white matter can be distinguished.
7. Wash in distilled water. Check differentiation under microscope and repeat 5-7 if necessary.
8. Stain in Cresyl Violet solution 5-10 minutes. Filter and preheat cresyl violet solution to 57°C just before use.
   Keep hot during staining.
9. Differentiate in several changes of 95% ethanol.
10. Dehydrate in absolute alcohol, clear in xylene, and mount with synthetic resin. (I use Histo-permount.)