

Technical Tip

A Toluidine Blue/Basic Fuchsin Stain for GMA Embedded Tissues

Solution A: Toluidine blue O (EMS #22050)/Sodium Borate Tetra (EMS #21130); 1% each in distilled water

Solution B: 1% Basic Fuchsin; 50% Ethanol in distilled water.

Both solutions are stable in amber glass-stoppered bottles for 6 months when stored at room temperature.

The working solution is prepared by adding 3ml of Solution B to 60ml distilled water. The section is covered with a few drops of Solution A for 3 to 5 minutes on a hot plate at 55-60°C.

Excess stain is washed off in running tap water.

After drying on the hot plate, the sections are then stained by covering them with a few drops of Solution B for 1 minute at room temperature.

They are washed well in running tap water, dried on a hot plate, and mounted with mounting medium (such as Entellan, EMS #14800; DPX, EMS #13510; Depex, EMS #13514; etc.)

The colors that are obtained on human tissue with this staining technique are as follows: nuclei: stained dark-blue; cytoplasm and connective tissue fibers: stained in various shades and intensities of red. Monica A. Abrew, et al. (1993) The J. of Histotechnology, Vol. 16, No. 2.