

Quenching Auto-fluorescence with Cupric Sulfate Buffer

Materials:

- Cupric Sulfate, certified A.C.S. grade (Fisher Scientific, C493-500)
- Ammonium Acetate, crystalline HPLC grade (Fisher Scientific, A639-500)
- Sterile MilliQ water
- pH Meter
- 1N HCl for adjusting pH
- Sterile 1L storage bottle (such as Corning 430518, sterile polystyrene with plug seal cap)

Procedure:

- In a sterilized 1L storage bottle, add the following:
 - 3.85g Ammonium Acetate
 - 0.07g Cupric Sulfate
 - 900mL Sterile MilliQ water
- Adjust pH to 5.0 with 1N HCl
- Add sterile MilliQ water to make 1L total volume
- Store at room temperature
- To use in immunohistochemistry to quench autofluorescence:
 - Following ALL staining procedures (unless mounting media contains DAPI), apply cupric sulfate buffer to tissue (either in wholemount or on slides) for 10 minutes at room temperature
 - Stop quenching reaction by rinsing with sterile water
 - Discard Cupric Sulfate after use – not suitable for reuse once it's been applied to tissue.