

## Sample Immunohistochemistry Protocol (Paraffin Sections)

1. Fixation and Sectioning
  - a. Fix dissected tissues in 2% paraformaldehyde, Bouin's solution, or other fixative for 30 minutes to overnight. (NOTE: Fixation time will depend on species, tissue origin and size of tissue sections).
  - b. Embed tissue in paraffin.
  - c. Section the tissues 5-10 micrometers thick.
  - d. If using paraformaldehyde as fixative antigen retrieval may be necessary.
2. Deparaffinization and Tissue Rehydration
  - a. Deparaffin samples by incubating sections 2-3 times in xylene for 10 minutes each.
  - b. Hydrate samples by placing twice in 100% ethanol for 3 minutes each, then in 95%, 70%, 50%, 30% ethanol for 2 minutes each.
3. Blocking and Primary Antibody Incubation
  - a. Block slides with 10% serum from the species from which the secondary antibody was taken or 8% BSA.
  - b. Incubate for 30 minutes to 1 hour at room temperature in a humidified chamber.
  - c. Wash samples in PBS containing 2% BSA for 5 minutes.
  - d. Incubate slides in a humidified chamber overnight with primary antibody solution (primary antibody in PBS containing 2% BSA).
  - e. Wash three times with PBS containing 2% BSA for 5 minutes.
4. Secondary Antibody Incubation and Detection
  - a. Incubate slides in a humidified chamber with secondary antibody solution (secondary antibody in PBS containing 2% BSA) according to manufacturer's protocols.
  - b. Wash three times with PBS containing 2% BSA for 5 minutes.
  - c. Detect according to manufacturer's protocols.