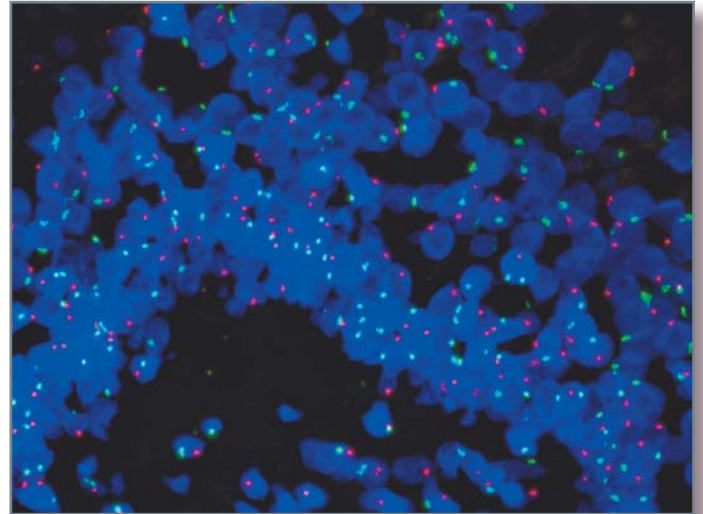
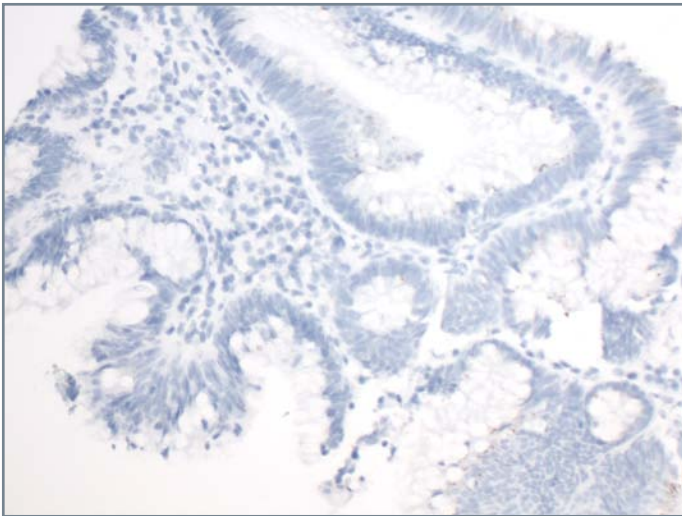


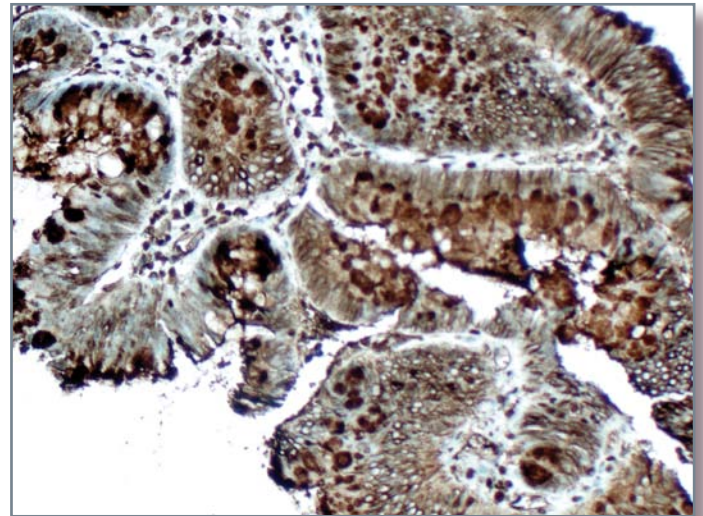
Occasionally, a fragment of tumor tissue is present within a paraffin block that is suspected to represent a 'floater' from another patient's specimen. Several methods can be employed to ascertain the relationship between the putative floater and the rest of the tissue in the block. The simplest method is to perform IHC studies identifying the two major blood group antigens (A and B), which are expressed on endothelial cells and a subset of epithelial and carcinoma cells. This method is successful in more than two-thirds of cases, given the probability of two patients having identical blood types. However, if the genders of the two patients whose specimens are in question are different, FISH studies employing centromeric probes for the X and Y chromosome can be performed, with female and male tissues identified by their unique XX and XY genotypes.



*FISH studies using centromeric enumeration probes to both chromosome X (red) and chromosome Y (green), confirming the male genotype of this biopsy fragment.*



*Blood Group A*



*Blood Group B*

*Adenocarcinoma demonstrated to derive from a blood group B-positive patient.*