

# Immunohistochemistry

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Immunohistochemistry emerged in the 1970s and has had a major impact on histopathological diagnosis. The technique detects a specific antigen using an antibody . The antibody is ). labelled with a dye and after binding to its target antigen is visible in the tissue section as a coloured stain, often brown ( Figure 11.25 ) . This allows the pathologist to confirm or exclude the presence of an antigen as well as determine its tissue distribution and cellular localisation. Quantification - xample, Ki67 is a cell cycle marker may also be possible. For e In situ that allows the pathologist to calculate a proliferative index, which in turn has prognostic value for neuroendocrine neoplasms and other lesions. Immunohistochemistry is appli - cable to fixed and frozen tissue and to cytological preparations ( Figure 11.22b ). It is safe, quick and relatively inexpensive and is often specific. However, false-positive results can result from non-specific staining or from cross-reaction with similar antigens. Excessive reliance on immunohistochemistry can lead to errors.

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