Glypican-3 (GPC3) is frequently overexpressed in hepatocellular carcinoma (HCC). It is used in HCC histopathology because a high expression of GPC3 in HCC cells is correlated with a poorer prognosis [1]. CD34 (cat. # RMAB 058) is another commonly used antibody for the diagnosis of HCC, since it can show diffusely positive staining in HCC but not in normal liver tissue [2]. In combination with GPC3 immunoreactivity, CD34 can be used to improve the accuracy of distinguishing between malignant hepatic lesions and benign mimics [3].

Arginase-1 (Arg-1) has been shown by IHC to be concentrated in perportal hepatocytes, so it can distinguish HCCs from metastatic tumors in the liver [4]. Similarly, Hepatocyte paraffin antigen 1 (HepPar-1) is a marker of hepatocytes. The combination of the markers Arg-1, HepPar-1, GPC3, and CD34 are an effective panel for distinguishing HCCs from metastatic carcinomas on fine-needle aspiration specimens [5].

References:


