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## Anti-human Pan Cytokeratin, mouse monoclonal (BS5)

BSH-7124-100	0,1 ml	concentrate
BSH-7124-1	1 ml	concentrate
BSH-7124-7	7 ml	ready-to-use

Clone BS5
Species Reactivity human
Source/Host mouse
Application IHC

Alias names Optibodies, CK, Keratin, pan CK, Optibody TRIS with 0.03% sodium azide, pH7,2

**Storage** Store at 4°C

## **Protocol**

After paraffin removing and rehydration:

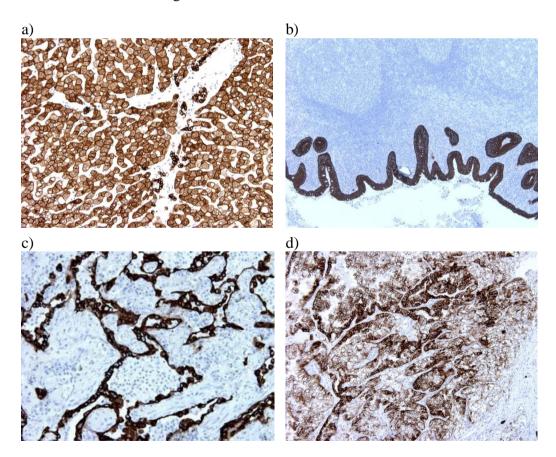
- 1. Pretreatment: HIER pH9 (TRIS-EDTA)
- 2. Wash (TBS-Tween)
- 3. Primary antibody: pan CK 1:100-1:300, 30 min.
- 4. Wash
- 5. 3 % H2O2, 10 min.
- 6. Wash
- 7. BioSiteHisto HRP One-Step Polymer (KDB-10009), 30 min
- 8. Wash
- 9. Wash
- 10. DAB high contrast Kit (BCB-20032), 10 min
- 11. Aqua
- 12. CuSO4 -post enhancement, 5 min
- 13. Aqua
- 14. Counter staining in diluted Mayer, 1 min
- 15. Bluing, 7 min in tap water
- 16. Dehydration, clearing and mounting

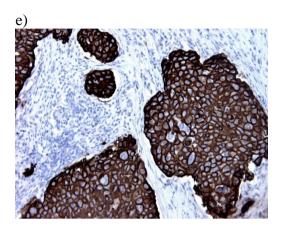
Dilution of this concentrated antibody depends on the detection system used and the final working dilution need to always be determined by the user.

Step 5. Endogenous peroxidase blocking can be done also before primary antibody incubation.

## **Background**

Biochemically, most members of the CK family fall into one of two classes, type I (acidic polypeptides) and type II (basic polypeptides). The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. Cytokeratins comprise a diverse group of intermediate filament proteins (IFPs) that are expressed as pairs in both keratinized and non-keratinized epithelial tissue. Cytokeratins play a critical role in differentiation and tissue specialization and function to maintain the overall structural integrity of epithelial cells. Cytokeratins have been found to be useful markers of tissue differentiation which is directly applicable to the characterization of malignant tumors.





CKpan stained tissue sections.
CKpan Optibody (Clone: BS5) with 1:200 dilution offers similar membranous staining pattern of the hepatocytes and bile ducts as the optimal staining criteria (a).
Columnar epithelium of appendix is strongly stained without any background staining (b). CKpan shows breast ductal breast carcinoma cells clearly and intensively (e) as well as lung adenocarcinoma cells (c). Optibody offers strong or moderate staining intensity in clear cell carcinoma of kidney (d).