

Mouse Anti-Pan Cytokeratin Monoclonal Antibody

Cat. Number:	BH0149
Target Protein:	Human Pan Cytokeratin
Quantity Size:	50ul / 100ul
Clonality:	Monoclonal
Clone No.:	4C3
Isotype:	IgG2b
Purity:	≥95%, Purified by Protein G
Form:	Liquid
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Application:	IHC (1:100-500)

Background: Cytokeratins are proteins of keratin-containing intermediate filaments found in the intracytoplasmic cytoskeleton of epithelial tissue. The cytokeratins are encoded by a family encompassing 30 genes. Among them, 20 are epithelial genes and the remaining 10 are specific for trichocytes. In the cytoplasm, the keratin filaments conform a complex network which extends from the surface of the nucleus to the cell membrane. Numerous accessory proteins are involved in the genesis and maintenance of such structure. This association between the plasma membrane and the nuclear surface provides important implications for the organization of the cytoplasm and cellular communication mechanisms. Apart from the relatively static functions provided in terms of supporting the nucleus and providing tensile strength to the cell, the cytokeratin networks undergo rapid phosphate exchanges mediated depolymerization, with important implications in the more dynamic cellular processes such as mitosis and post-mitotic period, cell movement and differentiation. Cytokeratins interact with desmosomes and hemidesmosomes, thus collaborating to cell-cell adhesion and basal cell-underlying connective tissue connection.