

Immunohistology

Cytokeratins



Antibodies against Cytokeratins for paraffin embedded tissues

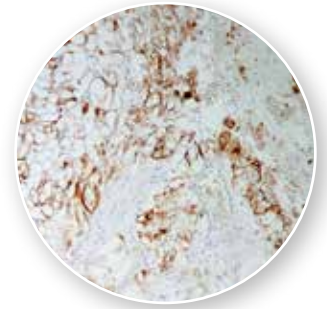
Cytokeratins belong to the superfamily of intermediate filament proteins which constitute the cytoskeleton of epithelial cells. The 20 known cytokeratins have been divided into two subfamilies: the acidic type I cytokeratins and the basic type II cytokeratins. Cytokeratins are usually found in heterodimeric pairs of acidic and basic subunits and therefore at least two, usually 4 to 8, cytokeratins can be found in each epithelial cell.

In immunohistochemistry antibodies against cytokeratins are often used to classify undifferentiated tumors and metastases of uncertain origin.

ZytoMed Systems offers antibodies to specific cyto-

keratins as well as broad spectrum or pan cytokeratin antibodies. Antibody cocktail Cytokeratin Pan Plus consisting of clones AE1, AE2, and 5D3 detects the broadest spectrum of cytokeratins. Clone KL1 reacts with a similar but not identical broad range of cytokeratins. In contrast to other broad spectrum cytokeratin antibodies, like AE1 + AE3, both antibodies detect cytokeratin 18 and stain most carcinomas of the liver and kidney.

The following table shows a selection of ZytoMed Systems' antibodies to human cytokeratins. The complete range of antibodies, as well as further information can be found on our webpage www.zytoMed-systems.com.



Cytokeratin (Pan), clone KL1, on renal cell carcinoma

► ZytoMed Systems' antibodies against Cytokeratins (selection)

Description	Dilution	Volume	Cat. No.	Reactivity with Cytokeratins																			
				basic (type II)								acidic (type I)											
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cytokeratin (HMW) Clone: 34βE12 Host: Mouse	1:25-1:50	6 ml	MSG027																				
		16 ml	BMS015																				
		0.5 ml	MSG027-05	✓					✓														
		1 ml	MSK027																				
Cytokeratin (Pan) Clone: AE1 + AE3 Host: Mouse	1:100-1:200	6 ml	MSG019																				
		16 ml	BMS006																				
		0.5 ml	MSG019-05	✓	✓	✓	✓	✓	✓		✓					✓	✓	✓		✓			
		1 ml	MSK019																				
Cytokeratin (Pan Plus) Clone: AE1 + AE3 + 5D3 Host: Mouse	-	6 ml	MSG098																				
	1:50-1:100	0.5 ml	MSG098-05	✓	✓	✓	✓	✓	✓		✓					✓	✓	✓		✓			
Cytokeratin (Pan)* Clone: KL1 Host: Mouse	-	6 ml	MSG113																				
	1:100	0.5 ml	MSK113-05	✓	✓				✓	✓	✓	✓				✓		✓	✓	✓			
		1 ml	MSK113																				
Cytokeratin (OSCAR) Clone: OSCAR Host: Mouse	-	6 ml	Z-465-26-Y																				
	1:40	1 ml	Z-465-01-Y								✓	✓							✓	✓			
Cytokeratin 5 Clone: SP27 Host: Rabbit	-	7 ml	503-3271																				
	1:50	1 ml	503-3274						✓														
Cytokeratin 5 & 6 Clone: D5/16B4 Host: Mouse	1:50-1:100	6 ml	MSG034																				
		16 ml	BMS017																				
		0.5 ml	MSK034-05						✓	✓													
		1 ml	MSK034																				

* Not available in all countries. Please contact your local distributor.

Reactivity according to Ordóñez (2013): 1, 2, 5, 6, 7, 8, 11, 14, 16, 17, 18

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► Zytomed Systems' antibodies against Cytokeratins (selection), continuation

Description	Dilution	Volume	Cat. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Cytokeratin 5 & 14 Clone: XM26 + LL002 Host: Mouse	-	6 ml	MSG106																					
		16 ml	BMS023																					
	1:50-1:100	0.5 ml	MSK106-05						✓									✓						
		1 ml	MSK106																					
Cytokeratin 6 Clone: SP87 Host: Rabbit	-	7 ml	503-3871																					
		0.1 ml	503-3870							✓														
	1:200	0.5 ml	503-3872																					
		1 ml	503-3874																					
Cytokeratin 7 Clone: OV-TL 12/30 Host: Mouse	-	6 ml	MSG032																					
		16 ml	BMS030																					
	1:100-1:200	0.5 ml	MSK032-05								✓													
		1 ml	MSK032																					
Cytokeratin 8 Clone: SP102 Host: Rabbit	-	7 ml	503-4021																					
	1:100	1 ml	503-4024								✓													
Cytokeratin 8 & 18 Clone: IVT2000 Host: Mouse	1:100-1:200	6 ml	MSG035																					
		0.5 ml	MSK035-05								✓											✓		
		1 ml	MSK035																					
Cytokeratin 10 Clone: polyclonal Host: Rabbit	-	7 ml	503-18981																					
	1:100	1 ml	503-18984										✓											
Cytokeratin 14 Clone: SP53 Host: Rabbit	-	7 ml	503-3531																					
	1:100	1 ml	503-3534														✓							
Cytokeratin 17 Clone: polyclonal Host: Rabbit	-	7 ml	503-18921																					
	1:200	1 ml	503-18924																	✓				
Cytokeratin 18 Clone: DC-10 Host: Mouse	1:100-1:200	6 ml	MSG016																					
		0.5 ml	MSK016-05																			✓		
		1 ml	MSK016																					
Cytokeratin 18 Clone: SP69 Host: Rabbit	-	7 ml	503-3691																					
	1:200-1:300	1 ml	503-3694																		✓			
Cytokeratin 19 Clone: A53-B/A2.26 Host: Mouse	1:200-1:300	6 ml	MSG017																					
		0.5 ml	MSK017-05																				✓	
		1 ml	MSK017																					
Cytokeratin 20 Clone: KS 20.08 Host: Mouse	-	16 ml	BMS037																				✓	
Cytokeratin 20 Clone: polyclonal Host: Rabbit	-	7 ml	503-16441																					
	1:200	1 ml	503-16444																				✓	

Dilution applies to immunohistochemistry on formalin fixed paraffin embedded tissue

Literature

- [1] Ordóñez NG. Broad-spectrum immunohistochemical epithelial markers: a review. Hum Pathol 44:1195-1215, 2013
- [2] Moll R *et al.* The catalog of human cytokeratins: Patterns of expression in normal epithelia, tumors and cultured cells. Cell 31:11-24, 1982