

**#4548** Store at -20°C

# Keratin 18 (DC10) Mouse mAb



100 µl  
 (20 western blots)

**Orders** ■ 877-616-CELL (2355)  
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**Support** ■ 877-678-TECH (8324)  
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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

**Entrez-Gene ID** #3875  
**Swiss-Prot Acc.** #P05783

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IHC-P, IF-IC, F Endogenous	H	46 kDa	Mouse IgG1**

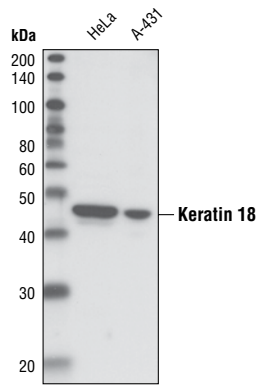
**Background:** Keratins (cytokeratins) are intermediate filament proteins that are mainly expressed in epithelial cells. Keratins assemble into filaments, forming heterodimers of an acidic keratin (or type I keratin, keratins 9 to 23) and a basic keratin (or type II keratin, keratins 1 to 8) (1,2). Keratin isoforms demonstrate tissue- and differentiation-specific profiles, which make them useful as biomarkers (1). Mutations in keratin genes are associated with skin disorders, liver and pancreatic diseases, and inflammatory intestinal diseases (3-6).

**Specificity/Sensitivity:** Keratin 18 (DC10) Mouse mAb detects endogenous levels of total keratin 18 protein. The antibody does not cross-react with other keratins.

**Source/Purification:** Monoclonal antibody (isotype: IgG1) is produced by immunizing mice with human PMC-42 breast carcinoma cells.

**Background References:**

- (1) Moll, R. et al. (1982) *Cell* 31, 11-24.
- (2) Chang, L. and Goldman, R.D. (2004) *Nat. Rev. Mol. Cell Biol.* 5, 601-613.
- (3) Ramaekers, F.C. and Bosman, F.T. (2004) *J. Pathol.* 204, 351-354.
- (4) Lane, E.B. and McLean, W.H. (2004) *J. Pathol.* 204, 355-366.
- (5) Zatloukal, K. et al. (2004) *J. Pathol.* 204, 367-376.
- (6) Owens, D.W. and Lane, E.B. (2004) *J. Pathol.* 204, 377-385.



Western blot analysis of extracts from HeLa and A431 cells using Keratin 18 (DC10) Mouse mAb.



Immunohistochemical analysis of paraffin-embedded human benign prostate hyperplasia using Keratin 18 (DC10) Mouse mAb.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**\*Species cross-reactivity is determined by western blot.**  
**\*\*Anti-mouse secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**

Western Blotting	1:2000
Immunohistochemistry (Paraffin)	1:500†
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Detection reagent:	SignalStain® Boost (HRP, Mouse) #8125
† Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.	
Immunofluorescence (IF-IC)	1:800
Flow Cytometry	1:2000

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

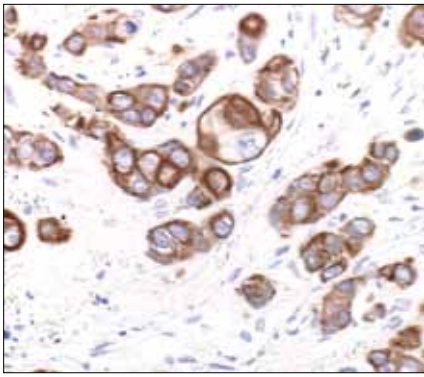
Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

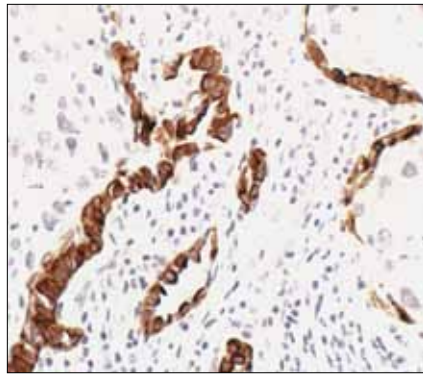
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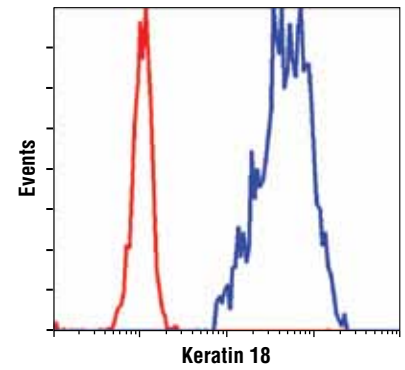
**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.



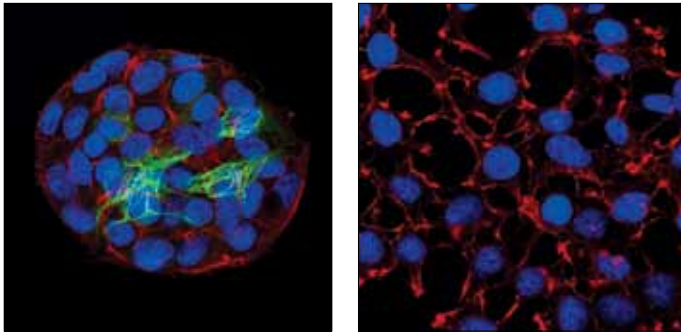
Immunohistochemical analysis of paraffin-embedded human breast carcinoma, showing cytoplasmic localization using Keratin 18 (DC10) Mouse mAb.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma using Keratin 18 (DC10) Mouse mAb.



Flow cytometric analysis of HeLa cells using Keratin 18 (DC10) Mouse mAb (blue) compared to a nonspecific negative control antibody (red).



Confocal immunofluorescent analysis of HepG2 (left) and SH-SY5Y (right) cells using Keratin 18 (DC10) Mouse mAb (green). Actin filaments have been labeled with DY-554 phalloidin (red). Blue pseudocolor = DRAQ5<sup>®</sup> #4084 (fluorescent DNA dye).