

#4545 Store at -20°C

Pan-Keratin (C11) Mouse mAb



100 µl
 (10 Western mini-blots)

Orders ■ 877-616-CELL (2355)
 orders@cellsignal.com
Support ■ 877-678-TECH (8324)
 info@cellsignal.com
Web ■ www.cellsignal.com

rev. 01/06/09

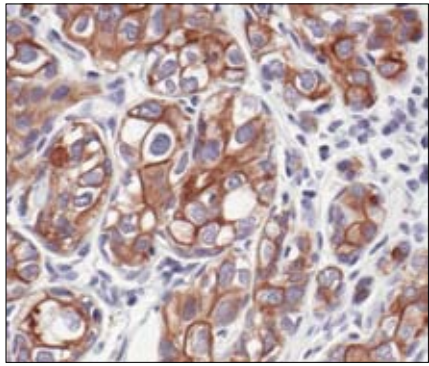
This product is for *in vitro* research use only and is not intended for use in humans or animals.
 This product is not intended for use as a therapeutic or in diagnostic procedures.

| Applications | Species Cross-Reactivity* | Molecular Wt. | Isotype |
|--|---------------------------|---------------|--------------|
| W, IHC-P, IF-IC, IF-P, F Endogenous | H, R, Mk | 46, 55 kDa | Mouse IgG1** |

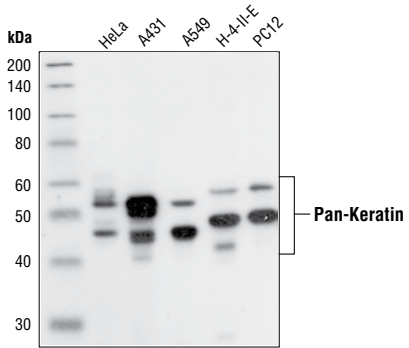
Background: Keratins (cytokeratins) are intermediate filament proteins that are mainly expressed in epithelial cells. Keratins assemble into filaments, forming heterodimers of an acidic keratin (or type I keratin, keratins 9 to 23) and a basic keratin (or type II keratin, keratins 1 to 8) (1,2). Keratin 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: Pan-Keratin (C11) Mouse mAb detects endogenous levels of total keratin 4, 5, 6, 8, 10, 13 and 18. The antibody does not cross-react with other keratins.

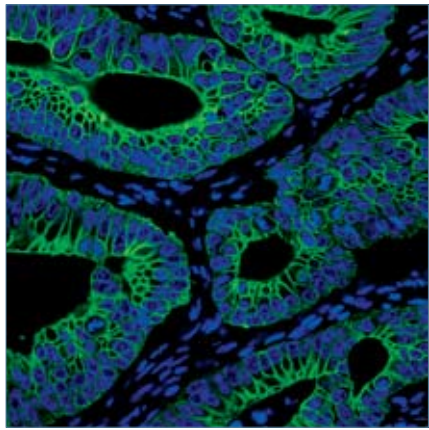
Source/Purification: Monoclonal antibody (isotype: IgG1) is produced by immunizing a animals with a cytoskeleton preparation from A431 cells.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Pan-Keratin (C11) Mouse mAb.



Western blot analysis of extracts from various cell lines using Pan-Keratin (C11) Mouse mAb.



Confocal immunofluorescent image of paraffin-embedded human colon carcinoma labeled with Pan-Keratin (C11) Mouse mAb (green). Blue pseudocolor = DRAQ5™ (fluorescent DNA dye).

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. 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 | 1:1000 |
| Immunohistochemistry (Paraffin) | 1:500 |
| Immunofluorescence (IF-IC) | 1:400 |
| Immunofluorescence (IF-P) | 1:50 |
| Flow Cytometry | 1:50 |

For application specific protocols please see the web page for this product at www.cellsignal.com.

Companion Products:

- Keratin 8/18 (C51) Mouse mAb #4546
- Keratin 18 (DC10) Mouse mAb #4548
- Pan-Keratin (C11) Mouse mAb (Alexa Fluor® 488 Conjugate) #4523
- Pan-Keratin (C11) Mouse mAb (Alexa Fluor® 647 Conjugate) #4528
- Phototope®-HRP Western Blot Detection System, Anti-mouse IgG, HRP-linked Antibody #7072
- Anti-mouse IgG, HRP-linked Antibody #7076
- Prestained Protein Marker, Broad Range (Premixed Format) #7720
- Biotinylated Protein Ladder #7727
- 20X LumiGLO® Reagent and 20X Peroxide #7003

Please visit www.cellsignal.com for a complete listing of recommended companion products.

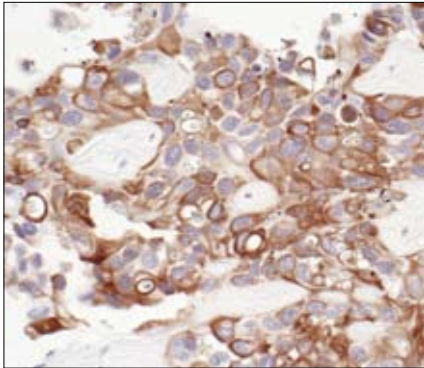
Background References:

- (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.

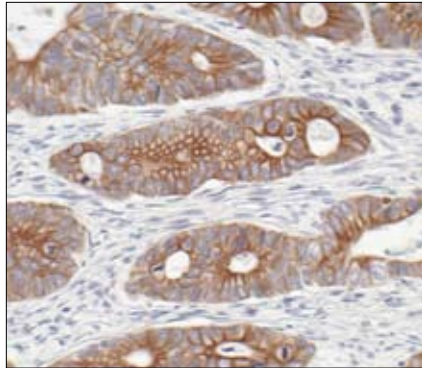
IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry IC—Immunocytochemistry IF—Immunofluorescence
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken X—Xenopus
 Species enclosed in parentheses are predicted to react based on 100% sequence homology.

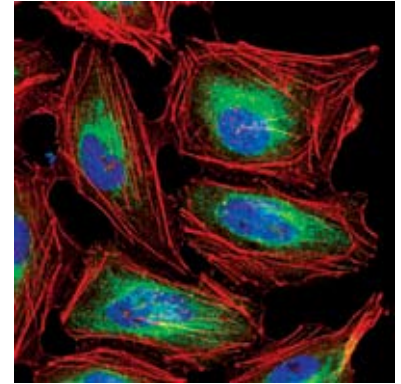
F—Flow cytometry E—ELISA D—DELFIAP®
 Z—zebra fish B—bovine All—all species expected



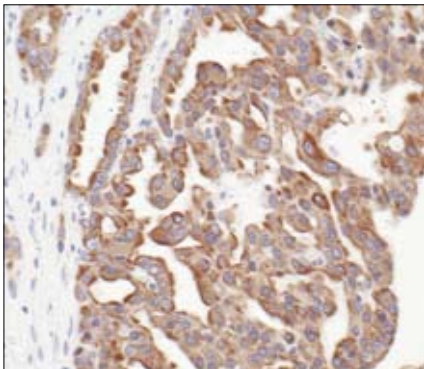
Immunohistochemical analysis of paraffin-embedded human transitional epithelial carcinoma (bladder) using Pan-Keratin (C11) Mouse mAb.



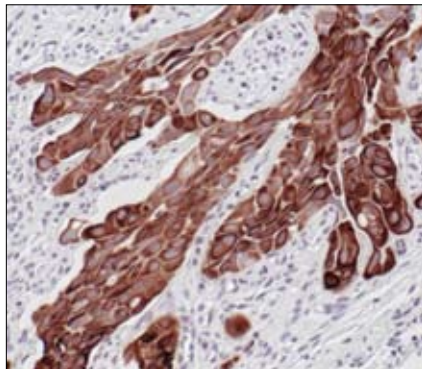
Immunohistochemical analysis of paraffin-embedded human colon carcinoma using Pan-Keratin (C11) Mouse mAb.



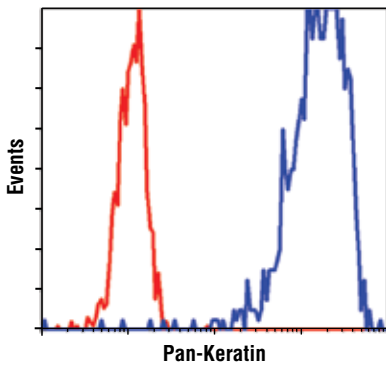
Confocal immunofluorescent analysis of HeLa cells using Pan-Keratin (C11) Mouse mAb (green). Actin filaments have been labeled with DY-554 phalloidin (red). Blue pseudocolor = DRAQ5™ (fluorescent DNA dye).



Immunohistochemical analysis of paraffin-embedded human prostate carcinoma using Pan-Keratin (C11) Mouse mAb.



Immunohistochemical analysis of paraffin-embedded H358 xenograft using Pan-Keratin (C11) Mouse mAb.



Flow cytometric analysis of MCF-7 cells using Pan-Keratin (C11) Mouse mAb (blue) compared to a nonspecific negative control antibody (red).