

**#4898** Store at -20°C

## Keratin 7 (R458) Antibody


**Cell Signaling**  
TECHNOLOGY®

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<b>Applications:</b> WB, IF-IC	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 55	<b>Source:</b> Rabbit	<b>UniProt ID:</b> #P08729	<b>Entrez-Gene Id:</b> 3855
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### Product Usage Information

#### Application

Western Blotting  
Immunofluorescence (Immunocytochemistry)

#### Dilution

1:1000  
1:50

### 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.

### Specificity / Sensitivity

Keratin 7 (R458) Antibody detects endogenous levels of total keratin 7 protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human keratin 7 protein. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Keratins (cytokeratins) are intermediate filament proteins that are mainly expressed in epithelial cells. Keratin heterodimers composed of an acidic keratin (or type I keratin, keratins 9 to 23) and a basic keratin (or type II keratin, keratins 1 to 8) assemble to form filaments (1,2). Keratin isoforms demonstrate tissue- and differentiation-specific profiles that make them useful as research biomarkers (1). Research studies have shown that mutations in keratin genes are associated with skin disorders, liver and pancreatic diseases, and inflammatory intestinal diseases (3-6). Keratin 7 and keratin 19 are present in hepatic and pancreatic progenitor/stem cells (7,8).

### 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, 601-13.
3. Ramaekers, F.C. and Bosman, F.T. (2004) *J Pathol* 204, 351-4.
4. Lane, E.B. and McLean, W.H. (2004) *J Pathol* 204, 355-66.
5. Zatloukal, K. et al. (2004) *J Pathol* 204, 367-76.
6. Owens, D.W. and Lane, E.B. (2004) *J Pathol* 204, 377-85.
7. Iyer, A. et al. (2008) *Hum Pathol* 39, 1370-7.
8. Meier, K. et al. (2009) *Ann Anat* 191, 70-82.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

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

### Applications Key

**WB:** Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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