

Product datasheet

anti-Keratin K5/K8 (Pan Epithelial) mouse monoclonal, C22, lyophilized, purified

Short overview

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| Cat. No. | 61031 |
| Quantity | 50 µg |
| Concentration | 50 µg/ml after reconstitution with 1 ml dist. water |

Product description

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| Host | Mouse |
| Antibody Type | Monoclonal |
| Isotype | IgG1 |
| Clone | Ks 5+8.22/C22 |
| Immunogen | Human keratin K8, purified from SDS PAGE gel |
| Formulation | Lyophilized; reconstitute in 1 ml dist. water (final solution contains 0.09% sodium azide, 0.5% BSA in PBS buffer, pH 7.4) |
| UniprotID | Q5XQN5 (Bovine), Q7RTS7 (Human), Q922U2 (Mouse), P05786 (Bovine), P05787 (Human), P11679 (Mouse) |
| Synonym | Keratin, type II cytoskeletal 74, Cytokeratin-74, CK-74, Keratin-5c, K5C, Keratin-74, K74, Type II inner root sheath-specific keratin-K6irs4, Type-II keratin Kb37, KRT74, K6IRS4, KB37, KRT5C, KRT6IRS4, Keratin, type II cytoskeletal 8, Cytokeratin-8, CK-8, Keratin-8, K8, Type-II keratin Kb8, KRT8, CYK8 |
| Conjugate | Unconjugated |
| Purification | Affinity chromatography |
| Storage before reconstitution | 2-8°C until indicated expiry date |
| Storage after reconstitution | Up to 3 months at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles |
| Intended use | Research use only |
| Application | ICC/IF, IHC, WB |
| Reactivity | Bovine, Human, Mouse, Rat |

Applications

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| Immunocytochemistry (ICC) | Assay dependent |
| Immunohistochemistry (IHC) - frozen | 1:10-1:100 (0.5-5 µg/ml) |
| Immunohistochemistry (IHC) - paraffin | 1:10-1:100 (0.5-5 µg/ml, protease treatment and/or microwave treatment recommended) |
| Western Blot (WB) | 1:500 (0.1 µg/ml) |

Background

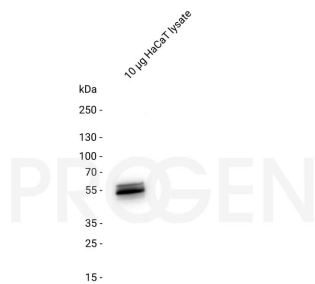
C22 represents an excellent marker for distinguishing carcinomas from all non-epithelial tumors. The antibody specifically reacts with keratins K5 and K8 present in nearly all epithelia.

Polypeptide reacting: Mr 52,500, Mr 58,000 keratins (type II keratins K5 and K8; formerly also designated cytokeratins 5 and 8) of human epithelial cells. Epitope has been mapped to aa 353-367 on alpha helical rod domain of Keratin K8 (Waseem et al., 2004).

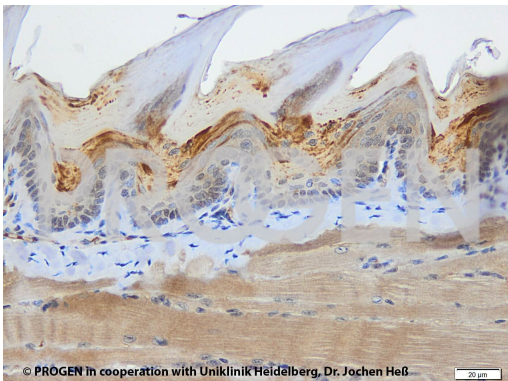
Reactivity on cultured cell lines: MCF-7, RT 112, HT-29, HaCaT, Detroit 562, RPMI 2650, SSC-12, bovine BMGE+H, BMGE-H, MDBK.

Waseem A, Karsten U, Leigh IM, Purkis P, Waseem NH, Lane BE: Conformational changes in the rod domain of human keratin 8 following heterotypic association with keratin 18 and its implication for filament stability. *Biochemistry* 43, 1283-1295 (2004).

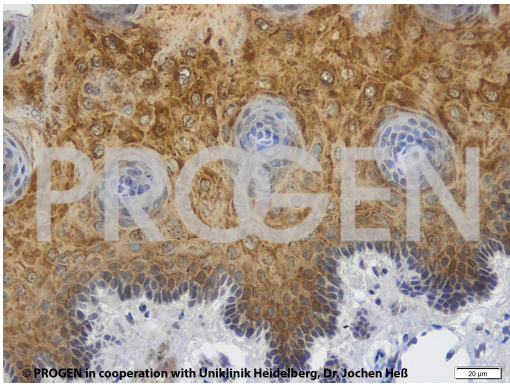
Product images



Western blot analysis of human HaCaT lysate with anti-Keratin K5/K8 antibody. Western blot analysis was performed on 10 µg HaCaT lysate. Cells were lysed with RIPA buffer. The PVDF membrane was blocked with 5% dry milk in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibody anti-Keratin K5/K8 mouse monoclonal, C22 (Cat. No. 690031) was diluted in blocking buffer (antibody concentration 0.1 µg/ml) and incubated for 1 h at RT. The secondary antibody anti-mouse IgG goat polyclonal, HRP conjugate was also diluted in blocking buffer (antibody concentration 0.2 µg/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using Pierce™ ECL Western Blotting Substrate.



IHC of mouse tongue (courtesy of J.Heß, University Hospital Heidelberg)



IHC of rat tongue (courtesy of J.Heß, University Hospital Heidelberg)

References

| Publication | Species | Application |
|--|---------|-------------|
| Frese, L. et al. Optimizing large-scale autologous human keratinocyte sheets for major burnsâ€”Toward an animal-free production and a more accessible clinical application. Heal. Sci. Reports 5, 1â€“11 (2022). | Human | IHC-P-IF |
| Obermayr, E. et al. Circulating tumor cells: potential markers of minimal residual disease in ovarian cancer? a study of the OVCAD consortium. Oncotarget. 8, 106415-106428 (2017). | human | ICC-IF |
| Heid, H. et al. Lipid droplets, perilipins and cytokeratins--unravelling liaisons in epithelium-derived cells. PLoS One 8, (2013). | human | ICC-IF |