

## Product datasheet

### anti-Keratin K18 mouse monoclonal, Ks18.04, liquid, purified

#### Short overview

<b>Cat. No.</b>	690028
<b>Quantity</b>	1 ml (50 µg/ml)
<b>Concentration</b>	50 µg/ml (50 µg)

#### Product description

<b>Host</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Clone</b>	Ks18.04
<b>Immunogen</b>	Human keratin K18 from HeLa cytoskeletal preparation
<b>Formulation</b>	PBS buffer, pH 7.4 with 0.09% sodium azide and 0.5% BSA
<b>UniprotID</b>	A1XEA5 (Bovine),P05783 (Human),P05784 (Mouse),F1SGG1 (Pig),Q5BJY9 (Rat),W5Q5M3 (Sheep),W5Q5M3 (Sheep)
<b>Synonym</b>	Keratin, type I cytoskeletal 18, Cell proliferation-inducing gene 46 protein, Cytokeratin-18, CK-18, Keratin-18, K18, KRT18, CYK18, PIG46
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Affinity chromatography
<b>Storage</b>	Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
<b>Intended use</b>	Research use only
<b>Application</b>	ICC/IF, IHC, WB
<b>Reactivity</b>	Bovine, Dog, Hamster, Human, Mouse, Pig, Rat, Sheep, Trout, Zebrafish

#### Applications

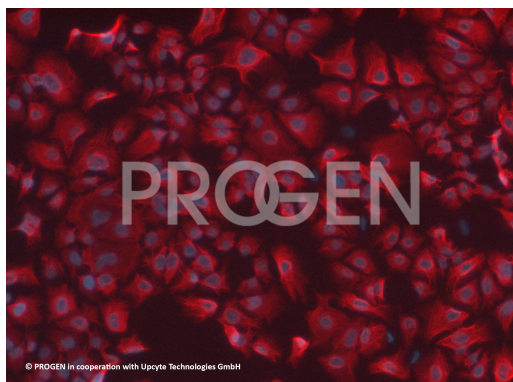
<b>Immunocytochemistry (ICC)</b>	Assay dependent
<b>Immunohistochemistry (IHC) - frozen</b>	1:20-1:200 (0.25-2.5 µg/ml)
<b>Immunohistochemistry (IHC) - paraffin</b>	1:20-1:200 (0.25-2.5 µg/ml; microwave treatment recommended)
<b>Western Blot (WB)</b>	1:100-1:500 (0.1 µg/ml-0.5 µg/ml)

#### Background

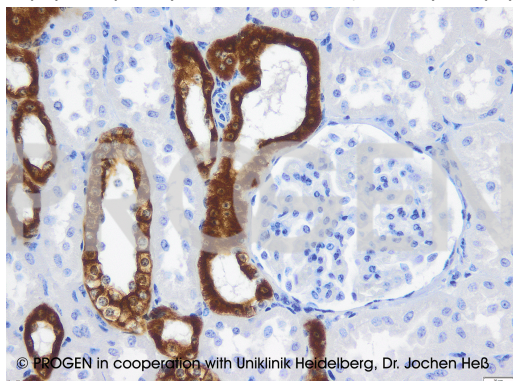
Ks18.04 represents an excellent marker to discriminate simple epithelia from those of different origin. Tumors specifically detected: all adenocarcinoma; mammary carcinoma, urinary bladder carcinoma, undifferentiated carcinoma, cervix carcinoma, hepatocellular carcinoma. Polypeptide reacting: Mr 45,000 polypeptide (human keratin K18; formerly also designated cytokeratin 18) of all simple type epithelia and basal cells of many squamous, nonepidermal epithelia.

Tested cultured cell lines: MCF-7.

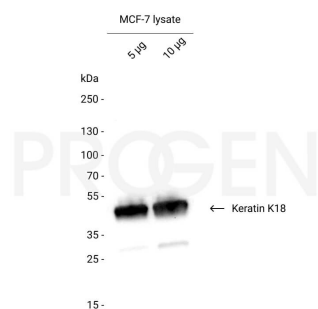
## Product images



Upcyte hepatocytes, dilution 1:50 (courtesy of upcyte technologies GmbH)



IHC of bovine kidney (courtesy of J.Heß, University Hospital Heidelberg)



Western blot analysis of human MCF-7 cell lysate with anti-Keratin K18 antibody. Western blot analysis was performed on 10 µg or 5 µg of MCF-7 lysate. Cells were lysed in PBS by homogenization. The PVDF membrane was blocked with 5% dry milk in PBST for 1 h at RT. The primary antibody anti-Keratin K18 mouse monoclonal, Ks18.04 (Cat. No. 690028) was diluted in blocking buffer (antibody concentration 0.25 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.

## References

Publication	Species	Application
<a href="#">Santoro, A. et al. p53 Loss in Breast Cancer Leads to Myc Activation, Increased Cell Plasticity, and Expression of a Mitotic Signature with Prognostic Value. Cell.Rep. 26, 624-638.e8 (2019)</a>	mouse	IHC (paraffin)
<a href="#">Moll, R., Franke, W. W., Schiller, D. L., Geiger, B. &amp; Krepler, R. The catalog of human cytokeratins: patterns of expression in normal epithelia, tumors and cultured cells. Cell 31, 11â€“24 (1982).</a>	human	
<a href="#">Soady, K. J. et al. Mouse mammary stem cells express prognostic markers for triple-negative breast cancer. Breast Cancer Res. 17, (2015).</a>	mouse	ICC-IF
<a href="#">Anderson, L. H., Boulanger, C. A., Smith, G. H., Carmeliet, P. &amp; Watson, C. J. Stem cell marker Prominin-1 regulates branching morphogenesis, but not regenerative capacity, in the mammary gland. Dev Dyn.: Author Manuscr. 240, 674â€“681 (2012).</a>	mouse	IHC (frozen)
<a href="#">Langbein, L. et al. Characterization of a Novel Human Type II Epithelial Keratin K1b, Specifically Expressed in Eccrine Sweat Glands. J. Invest. Dermatol. 125, 428â€“444 (2005).</a>	human	IHC (frozen)