

Product datasheet

anti-Keratin K19 mouse monoclonal, Ks19.1 (A53-B/A2), lyophilized, purified

Short overview

Cat. No.	61010
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml dist. water

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG2a
Clone	Ks19.1 (A53-B/A2)
Immunogen	Keratin K19 of Mr 40 000; from cultured human MCF-7 cells
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	P08727 (Human)
Synonym	Keratin, type I cytoskeletal 19, Cytokeratin-19, CK-19, Keratin-19, K19, KRT19
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	ELISA, ICC/IF, IHC, WB
Reactivity	Human

Applications

ELISA	Assay dependent
Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	1:5-1:50
Immunohistochemistry (IHC) - paraffin	1:5-1:50 (microwave treatment recommended)
Western Blot (WB)	1:50-1:500

Background

Ks 19.1 represents an excellent marker to discriminate glandular epithelial carcinoma from those of different origin. No reaction with hepatocellular carcinoma. Polypeptide reacting: Mr 40,000 polypeptide (keratin K19; formerly also designated cytokeratin 19) of human glandular epithelia. The epitope has been localized on aa. 311-335 (QQLSMKAALEDTLAETEARFGAQL) of the alpha-helical fragment.

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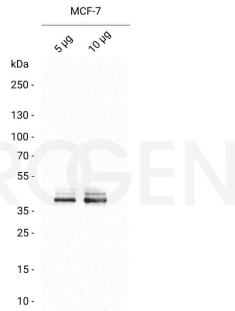
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2024 December 11 / Version: 61010/DS-280824ibg | Page 1

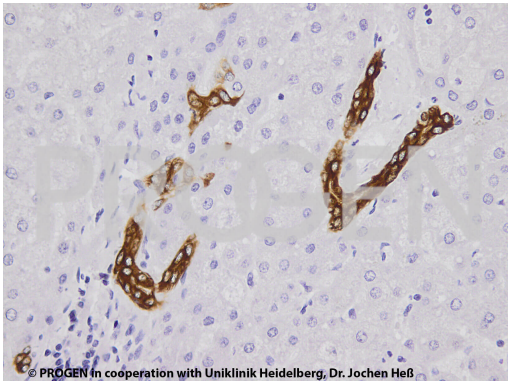
Tumors specifically detected: all tested adenocarcinoma; cholangio carcinoma of liver; renal cell carcinoma; transitional cell carcinoma of the bladder; ovary carcinoma; squamous cell carcinoma of cervix, bronchus and lung (intermediate type); mesothelioma; carcinoid tumor of bronchus; breast carcinoma; thymoma.

Reactivity on cultured cell lines: MCF-7.

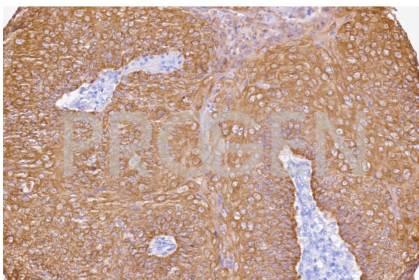
Product images



Western blot analysis of MCF-7 lysate with anti-Keratin K19 antibody (Cat. No. 61010). Western blot analysis was performed on 5 ug/10 ug MCF-7 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 K19 mouse monoclonal (Cat. No. 61010) was diluted in blocking buffer (antibody concentration 0.5 ug/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 ug/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using Pierce™ ECL Western Blotting Substrate.



IHC analysis of human liver using anti-Keratin K19 antibody (Cat. No. 61010). IHC was performed on formalin fixed paraffin embedded sections. The samples were deparaffinized with xylol and ethanol followed by heat induced antigen retrieval with 10 mM citrate buffer. After preparation the tissue was blocked with normal serum for 20 min at RT. The primary antibody anti-Keratin K19 (Cat. No. 61010) was diluted in PBS (antibody concentration 1 ug/ml) and incubated at 4°C over-night. The secondary antibody ImmPRESS HRP anti-mouse IgG was incubated for 20 min at RT. Slides were incubated with DAB solution until a brown staining is visible and with Haemalaun for a few minutes. The picture was acquired using microscopy (courtesy of J. Hess, University Hospital Heidelberg).



IHC analysis of human head and neck squamous cell carcinoma using anti-Keratin K19 antibody (Cat. No. 690010). IHC was performed on formalin fixed paraffin embedded sections. The samples were deparaffinized with xylol and ethanol followed by heat induced antigen retrieval with 10

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2024 December 11 / Version: 61010/DS-280824ibg | Page 2

mM citrate buffer. After preparation the tissue was blocked with normal serum for 20 min at RT. The primary antibody anti-Keratin K19 (Cat. No. 690010) was diluted in PBS (antibody concentration 0.1 µg/ml) and incubated at 4°C over-night. The secondary antibody ImmPRESS HRP anti-mouse IgG was incubated for 20 min at RT. Slides were incubated with DAB solution until a brown staining is visible and with Haemalaun for a few minutes. The 20x picture was acquired using microscopy (courtesy of J. Hess, University Hospital Heidelberg).

References

Publication	Species	Application
Mariani, R., Paranjpe, S., Dobrowolski, R. & Weber, G. 14-3-3 targets keratin intermediate filaments to mechanically sensitive cell-cell contacts. Mol Biol Cell. 31, 930-943(2020).	Xenopus	IHC-frozen/IF
Line Hamelin, C. et al. Identification and verification of heat shock protein 60 as a potential serum marker for colorectal cancer. FEBS J. 278, 4845-4859 (2011).	human	WB
Langbein, L., Yoshida, H., Praetzel-Wunder, S., Parry, D. A. & Schweizer, J. The Keratins of the Human Beard Hair Medulla: The Riddle in the Middle. J. Invest. Dermatol. 130, 55-73 (2010).	human	IHC (frozen)
HÄchtlen-Vollmar, W. et al. Occult epithelial tumor cells detected in bone marrow by an enzyme immunoassay specific for cytokeratin 19. Int. J. cancer 70, 396-400 (1997).	human	ELISA
Dittadi, R. et al. Standardization of assay for cytokeratin-related tumor marker CYFRA21.1 in urine samples. Clin. Chem. 42, 1634-8 (1996).	human	ELISA