Product datasheet

anti-Keratin K7 mouse monoclonal, Ks7.18, lyophilized, purified

Short overview

Cat. No.	61025
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml dist. water

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG1
Clone	Ks7.18
Immunogen	Cytoskeletal proteins from cultured HeLa 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	Q29S21 (Bovine), P08729 (Human), A0A287ASI0 (Pig), H0VIA2 (Guinea pig), A0A6P7DW90 (Sheep)
Synomym	Keratin, type II cytoskeletal 7, Cytokeratin-7, CK-7, Keratin-7, K7, Sarcolectin, Type-II keratin Kb7, KRT7, SCL
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, Pig, Sheep
No reactivity	Dog, Mouse, Rabbit, Rat

Applications

Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	1:50-1:250 (0.2-1 µg/ml)
Immunohistochemistry (IHC) - paraffin	1:50-1:250 (0.2-1 µg/ml, protease treatment and/or microwave treatment recommended)
Western Blot (WB)	1:1,000-1:2,000 (25-50 ng/ml)

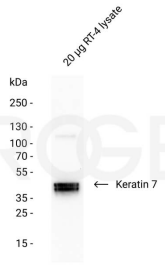
Background

Ks7.18 represents an excellent marker for the discrimination of specific subtypes of adenocarcinoma: e.g. adenocarcinoma of pancreas, bile duct

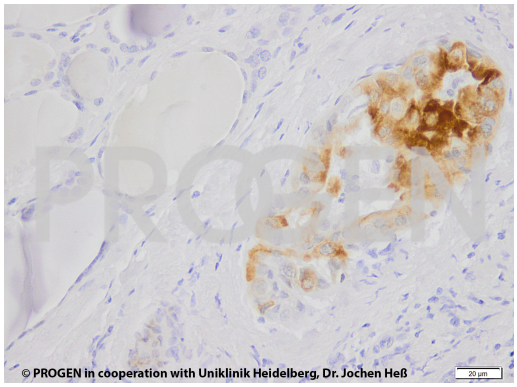
carcinoma and transitional carcinoma of bladder are stained, whereas hepatocellular and prostate carcinomas are negative. Detects specific subtypes of adenocarcinomas: adenocarcimona of pancreas, gallbladder, lung, cervix; cholangio carcinoma of liver; ductal and lobular carcinoma of breast; carcinomas of ovary; transitional cell carcinoma of bladder; mesothelioma; negative with most cases of hepatocellular carcinoma. In colorectal carcinoma early stages are reported to be negative but advanced stages of tumor development are positive for keratin K7 expression. Occasionally, staining of blood vessel walls, particularly of endothelial cells may be observed. Reacts with Mr 54,000 polypeptide (keratin K7; formerly also designated cytokeratin 7) of human glandular epithelia.

Reactivity on cultured cell lines: HeLa, RT 112, T24, BT-20, CAMA-1, Detroit 562, (MCF-7 and HT-29 are negative).

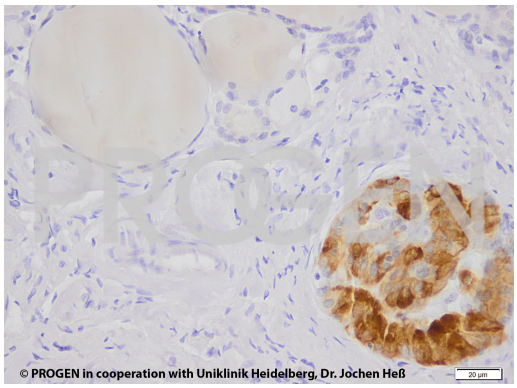
Product images



Western blot analysis of RT-4 lysate with anti-Keratin K7 antibody. Western blot analysis was performed on 20 µg RT-4 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 K7 mouse monoclonal, Ks7.18 (Cat. No. 690025) was diluted in blocking buffer (antibody concentration 50 ng/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 PierceTM ECL Western Blotting Substrate.



Human thyroid carcinoma (courtesy of J.Heß, University Hospital Heidelberg)



Human thyroid carcinoma (courtesy of J.Heß, University Hospital Heidelberg)

References

Publication	Species	Application
Alam, C. M. et al. Decreased levels of keratin 8 sensitize mice to streptozotocin-induced diabetes.Â Acta Physiol (Oxf).224,e13085(2018).	mouse	IHC (frozen)/IF
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, 55â€“73 (2010).	human	IHC (frozen)
Demirkesen, C., Hoede, N. & Moll, R. Epithelial markers and differentiation in adnexal neoplasms of the skin: an immunohistochemical study including individual cytokeratins. J. Cutan. Pathol. 22, 518â€“35 (1995).	human	IHC (paraffin)