

ARG62975 anti-Cytokeratin 18 antibody [C-04]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [C-04] recognizes Cytokeratin 18
Tested Reactivity	Hu, Ms, Rat, Cat, Cow, Dog, Goat, Hm, Hrs, Mamm, Pig, Sheep
Tested Application	ELISA, FACS, ICC/IF, IHC-Fr, IHC-P, IP, WB
Specificity	The clone C-04 reacts with Cytokeratin 18 (45 kDa), a member of intermediate filaments subfamily represented in epithelial tissues.
Host	Mouse
Clonality	Monoclonal
Clone	C-04
Isotype	IgG1
Target Name	Cytokeratin 18
Immunogen	Cytoskeleton preparation of epidermal carcinoma cell line A431.
Conjugation	Un-conjugated
Alternate Names	Keratin, type I cytoskeletal 18; Cytokeratin-18; K18; CK-18; Cell proliferation-inducing gene 46 protein; Keratin-18; CYK18

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	FACS	1 - 4 µg/ml
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	10 µg/ml
	IP	Assay-dependent
	WB	1 - 2 µg/ml

Application Note

Western Blotting: incubate overnight in 4°C. Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. Application note: Non-reducing conditions. SDS-PAGE (10% separating gel).

ELISA: Application note: The antibody C-04 has been tested as the capture antibody in a sandwich ELISA for analysis of Cytokeratin 18 in combination with antibody DA-7 (cat. no. ARG62977) and with the antibody DC-10 (cat. no. ARG53186).

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control

WB: HeLa and MCF-7
IHC-P: Colon and kidney tissue.

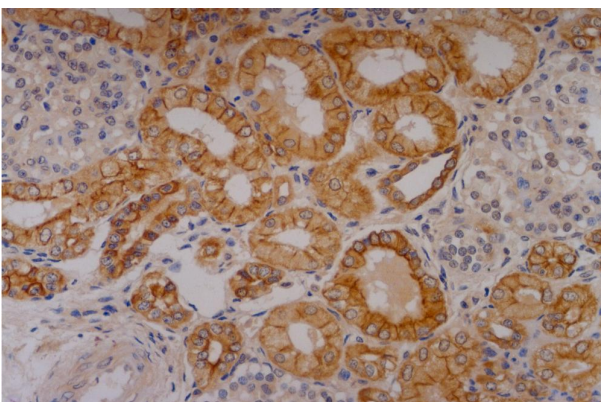
Properties

Form	Liquid
Purification	Purified from hybridoma culture supernatant by protein A-affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

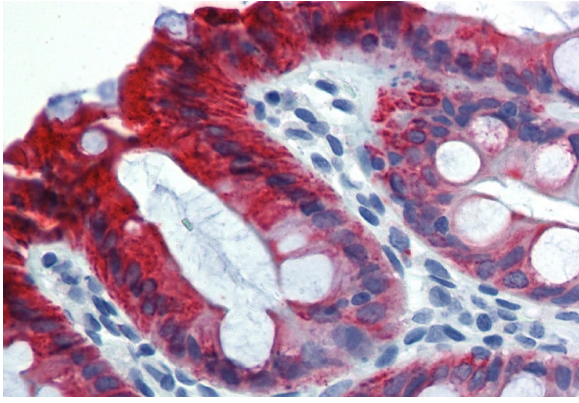
Gene Symbol	KRT18
Gene Full Name	keratin 18, type I
Background	Cytokeratin 18, together with its filament partner Cytokeratin 8, are perhaps the most commonly found members of the intermediate filament gene family. They are expressed in single layer epithelial tissues of the body. Mutations in this gene have been linked to cryptogenic cirrhosis. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]
Function	Cytokeratin 18 involved in the uptake of thrombin-antithrombin complexes by hepatic cells. When phosphorylated, plays a role in filament reorganization. Involved in the delivery of mutated CFTR to the plasma membrane. Together with KRT8, is involved in interleukin-6 (IL-6)-mediated barrier protection. [UniProt]
Research Area	Controls and Markers antibody; Signaling Transduction antibody
Calculated Mw	48 kDa
PTM	Phosphorylation at Ser-34 increases during mitosis. Hyperphosphorylated at Ser-53 in diseased cirrhosis liver. Phosphorylation increases by IL-6. Proteolytically cleaved by caspases during epithelial cell apoptosis. Cleavage occurs at Asp-238 by either caspase-3, caspase-6 or caspase-7. O-GlcNAcylation increases solubility, and decreases stability by inducing proteasomal degradation.

Images



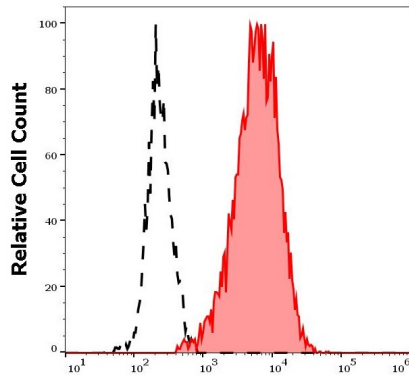
ARG62975 anti-Cytokeratin 18 antibody [C-04] IHC-P image

Immunohistochemistry: Human kidney (paraffin-embedded sections) stained with ARG62975 anti-Cytokeratin 18 antibody [C-04].



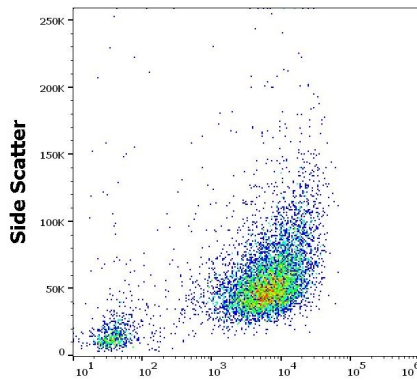
ARG62975 anti-Cytokeratin 18 antibody [C-04] IHC-P image

Immunohistochemistry: Human colon (paraffin-embedded sections) stained with ARG62975 anti-Cytokeratin 18 antibody [C-04].



ARG62975 anti-Cytokeratin 18 antibody [C-04] FACS image

Flow Cytometry: Separation of stained HeLa cells (red-filled) from unstained HeLa cells (black-dashed). Cells were stained with ARG62975 anti-Cytokeratin 18 antibody [C-04] at 0.6 $\mu\text{g}/\text{ml}$ dilution, followed by FITC-conjugated Goat anti-Mouse antibody.



ARG62975 anti-Cytokeratin 18 antibody [C-04] FACS image

Flow Cytometry: HeLa cell suspension stained with ARG62975 anti-Cytokeratin 18 antibody [C-04] at 0.6 $\mu\text{g}/\text{ml}$ dilution, followed by FITC-conjugated Goat anti-Mouse antibody.