ARG62977
anti-Cytokeratin 18 antibody [DA-7]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [DA-7] recognizes Cytokeratin 18
Tested Reactivity	Hu
Species Does Not React With	Ms, Rat, Bov, Dog, Hm, Pig, Sheep
Tested Application	ELISA, ICC/IF, IHC-P, IP, WB
Specificity	The clone DA-7 reacts with Cytokeratin 18 (45 kDa). Cytokeratins are a member of intermediate filaments subfamily represented in epithelial tissues.
Host	Mouse
Clonality	Monoclonal
Clone	DA-7
Isotype	IgG1
Target Name	Cytokeratin 18
Species	Human
Immunogen	Human breast carcinoma cell line PMC-42.
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
ICC/IF	Assay-dependent
IHC-P	10 µg/ml
IP	Assay-dependent
WB	1 - 2 µg/ml

Application Note

WB: Incubation: Overnight at 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 condition. SDS-PAGE (10% separating gel).
ELISA: The clone DA-7 has been tested as the detection antibody in a sandwich ELISA for analysis of Cytokeratin 18 in combination with the clone C-04 (ARG62975).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control

WB: HeLa, A431 and MCF7
IHC-P: Colon and skin
ICC/IF: HeLa and MCF7

ELISA: MCF7

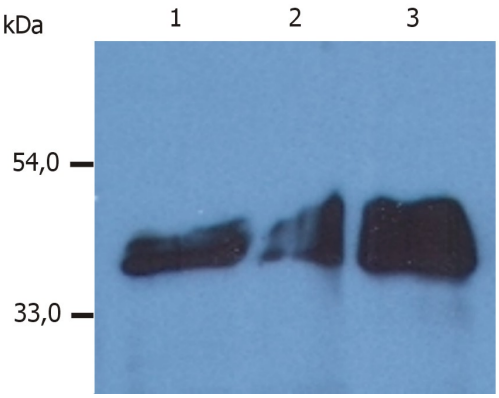
Properties

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

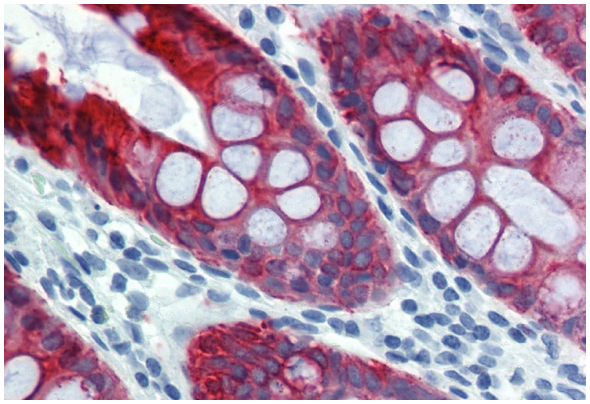
Database links	GeneID: 3875 Human Swiss-port # P05783 Human
Gene Symbol	KRT18
Gene Full Name	keratin 18, type I
Background	Cytokeratin 18, together with its filament partner Cytokeratin 8, are perhaps the most commonly found members of the intermediate filament gene family. They are expressed in single 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



ARG62977 anti-Cytokeratin 18 antibody [DA-7] WB image

Western blot: 1. HeLa cell lysate, 2. A431 cell lysate, 3. MCF-7 cell lysate stained with ARG62977 anti-Cytokeratin 18 antibody [DA-7].



ARG62977 anti-Cytokeratin 18 antibody [DA-7] IHC-P image

Immunohistochemistry: Human colon (paraffin sections) stained with ARG62977 anti-Cytokeratin 18 antibody [DA-7].