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Keratin 18 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52707

Product Information

Application	WB, ICC
Primary Accession	P05783
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Calculated MW	48058

Additional Information

Gene ID	3875
Other Names	Cell proliferation inducing gene 46 protein;Cell proliferation inducing protein 46;Cell proliferation-inducing gene 46 protein;CK 18;CK-18;CK18;Cytokeratin 18;Cytokeratin endo B;Cytokeratin-18;Cytokeratin18;K 18;K18;K1C18_HUMAN;Keratin 18;Keratin D;Keratin type I cytoskeletal 18;keratin, type I cytoskeletal 18;Keratin-18;Keratin18;Kerd;KRT18.
Dilution	WB~~1:2000 ICC~~1:800
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	KRT18 (HGNC:6430)
Synonyms	CYK18
Function	Structural component of intermediate filaments in simple epithelial cells. Forms intermediate filaments by heterodimerizing with the type II keratin KRT8, providing mechanical stability and resilience to epithelial cells (PubMed:15529338, PubMed:26823019). Involved in ARHGEF40-mediated actin stress fiber formation and tensional force- induced stress fiber formation and reinforcement (PubMed:26823019). Integrates into the intermediate filament network of skeletal muscle fibers alongside desmin and KRT19, contributing to force transmission (By similarity). Organization and orientation of KRT8/KRT18 filaments are responsible for the properly elongated morphology of epithelial tubules (By similarity). Also acts

	downstream of ROCK kinase activation as part of a positive feedback mechanism in response to cellular mechanical stress loading (PubMed:26823019). Involved in the uptake of thrombin-antithrombin complexes by hepatic cells (By similarity). When phosphorylated, plays a role in filament reorganization (PubMed:7523419, PubMed:8522591, PubMed:9298992, PubMed:9524113). Involved in the delivery of mutated CFTR to the plasma membrane (PubMed:15529338, PubMed:16424149). Involved in interleukin-6 (IL-6)- mediated barrier protection (PubMed:17213200).
Cellular Location	Nucleus matrix {ECO:0000250|UniProtKB:Q5BJY9}. Cytoplasm, perinuclear region. Nucleus, nucleolus. Cytoplasm {ECO:0000250|UniProtKB:Q5BJY9}
Tissue Location	Expressed in colon, placenta, liver and very weakly in exocervix. Increased expression observed in lymph nodes of breast carcinoma.

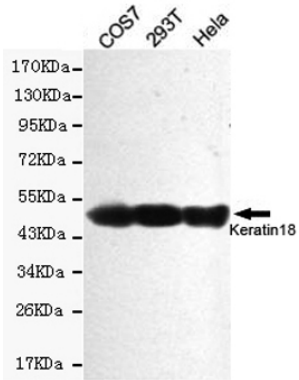
Background

Involved in the uptake of thrombin-antithrombin complexes by hepatic cells (By similarity). 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.

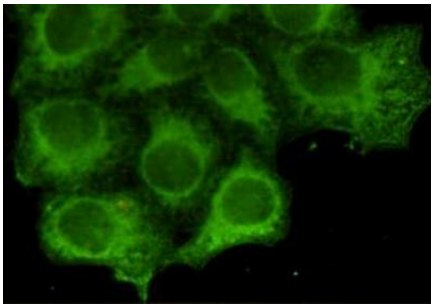
References

Oshima R.G.,et al.Differentiation 33:61-68(1986).
Kim J.W.,et al.Submitted (SEP-2004) to the EMBL/GenBank/DDBJ databases.
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.
Kulesh D.A.,et al.Mol. Cell. Biol. 8:1540-1550(1988).

Images



Western blot detection of Keratin 18 in Hela,COS7 and 293T cell lysates using Keratin 18 mouse mAb (1:2000 diluted).Predicted band size:46KDa.Observed band size:46KDa.



Immunocytochemistry staining of HeLa cells fixed by anhydrous methanol for 2 h at -20℃ and using anti-Keratin 18 mouse mAb (dilution 1:800).

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