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phospho-CK18 (Ser52) Rabbit pAb

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Catalog # AP94757

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P05784
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47538
Physical State	Liquid
Immunogen	KLH conjugated synthesised phosphopeptide derived from mouse CK18 around the phosphorylation site of Ser52
Epitope Specificity	SR(p-S)VW
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, perinuclear region. Nucleus, nucleolus.
SIMILARITY	Belongs to the intermediate filament family.
SUBUNIT	Heterotetramer of two type I and two type II keratins. KRT18 associates with KRT8. Interacts with the thrombin-antithrombin complex (By similarity). Interacts with PNN, HCV core protein and mutated CFTR. Interacts with YWHAE, YWHAH and YWHAZ only when phosphorylated. Interacts with DNAJB6, TCHP and TRADD.
Post-translational modifications	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.
DISEASE	Defects in KRT18 are a cause of cirrhosis (CIRRH) [MIM:215600].
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	KRT18 encodes the type I intermediate filament chain keratin 18. Keratin 18, together with its filament partner keratin 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]

Additional Information

Gene ID	16668
Other Names	Keratin, type I cytoskeletal 18, Cytokeratin endo B, Keratin D, Cytokeratin-18,

	CK-18, Keratin-18, K18, Krt18, Kerd, Krt1-18
Target/Specificity	Expressed in colon, placenta, liver and very weakly in exocervix. Increased expression observed in lymph nodes of breast carcinoma.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

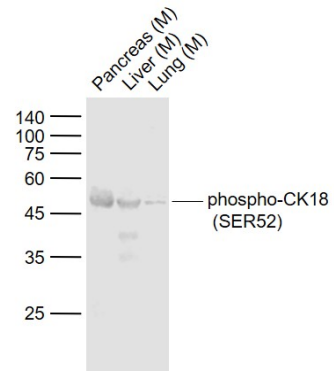
Name	Krt18 {ECO:0000312|MGI:MGI:96692}
Synonyms	Kerd, Krt1-18
Function	Required for the formation of KRT8/KRT18 filaments that are involved in ARHGEF40-mediated actin stress fiber formation and tensional force-induced stress fiber formation and reinforcement (By similarity). Also acts downstream of ROCK kinase activation as part of a positive feedback mechanism in response to cellular mechanical stress loading (By similarity). Organization and orientation of KRT18 filaments are responsible for the properly elongated morphology of epithelial tubules (By similarity). 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 (PubMed:17213200).
Cellular Location	Nucleus matrix {ECO:0000250|UniProtKB:Q5BJY9}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P05783}. Nucleus, nucleolus {ECO:0000250|UniProtKB:P05783}. Cytoplasm {ECO:0000250|UniProtKB:Q5BJY9}
Tissue Location	Expressed in endoderm, intestinal epithelial cells and in most extraembryonic tissues.

Background

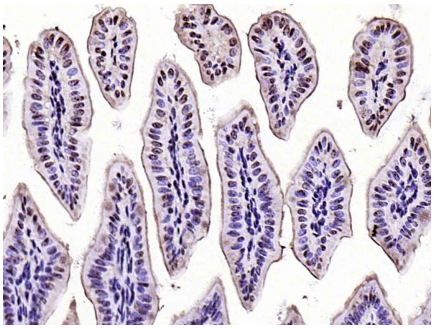
KRT18 encodes the type I intermediate filament chain keratin 18. Keratin 18, together with its filament partner keratin 8, are perhaps the most commonly found members of the intermediate filament gene family. They are expressed in single layer epithelial tissues of the body. Mutations in this gene have been linked to cryptogenic cirrhosis. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

Images

Sample:
Lane 1: Pancreas (Mouse) Lysate at 40 ug
Lane 2: Liver (Mouse) Lysate at 40 ug
Lane 3: Lung (Mouse) Lysate at 40 ug
Primary: Anti- phospho-CK18 (SER52) (AP94757) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000



dilution
Predicted band size: 48 kD
Observed band size: 48 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse small intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-CK18 (Ser52)) Polyclonal Antibody, Unconjugated (AP94757) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.