



Cytokeratin 18 (phospho Ser52) Polyclonal Antibody

Catalog No	YP-Ab-03037
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	KRT18
Immunogen	The antiserum was produced against synthesized peptide derived from human Keratin 18 around the phosphorylation site of Ser52. AA range:21-70
Specificity	Phospho-Cytokeratin 18 (S52) Polyclonal Antibody detects endogenous levels of Cytokeratin 18 protein only when phosphorylated at S52.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	KRT18;Cell proliferation-inducing gene 46 protein;CK 18;CK18;CK-18;Cytokeratin 18;Keratin type I cytoskeletal 18;CYK18;PIG46;Keratin,type I cytoskeletal 18;Cytokeratin-18;Keratin-18;K18
Observed Band	48kD
Calculated Molecular Weight	48kD
Cell Pathway	Cytoplasm, perinuclear region. Nucleus, nucleolus.
Tissue Specificity	Expressed in colon, placenta, liver and very weakly in exocervix. Increased expression observed in lymph nodes of breast carcinoma.
Function	disease:Defects in KRT18 are a cause of cryptogenic cirrhosis [MIM:215600]., function: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.,induction:By IL-6.,miscellaneous:There are two types of cytoskeletal and microfibrillar keratin: I (acidic; 40-55 kDa) and II (neutral to



basic; 56-70 kDa).,PTM:O-glycosylated at multiple sites; glycans consist of single N-acetylglucosamine residues.,PTM:Phosphorylation at Ser-34 increases during mitosis. Hyperphosphorylated at Ser-53 in diseased cirrhosis liver. Phosphorylation increases by IL-6.,PTM:Proteolytically cleaved by caspases during epithelial cell apoptosis. Cleavage occurs at Asp-238 by either

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],

matters needing attention

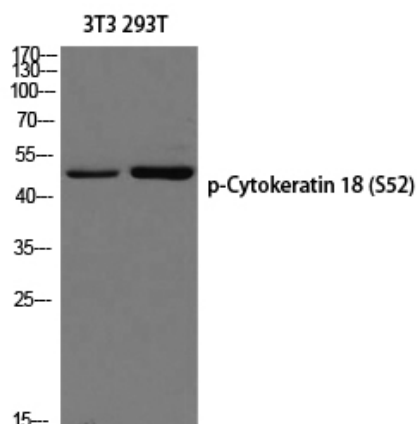
Avoid repeated freezing and thawing!

Usage suggestions

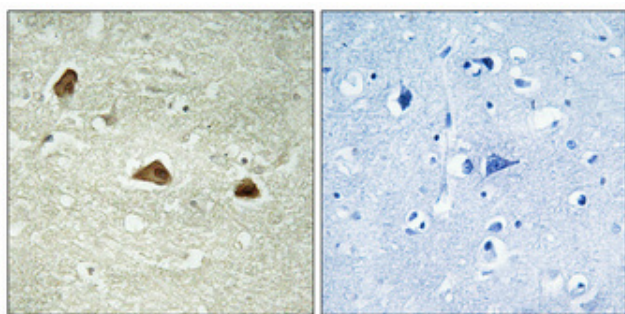
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



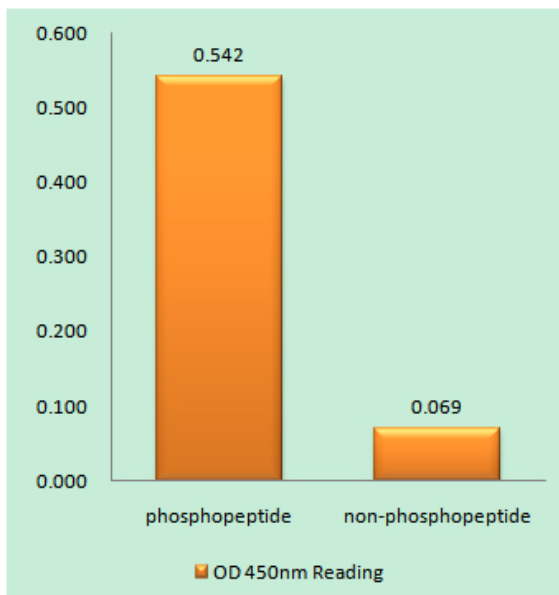
Products Images



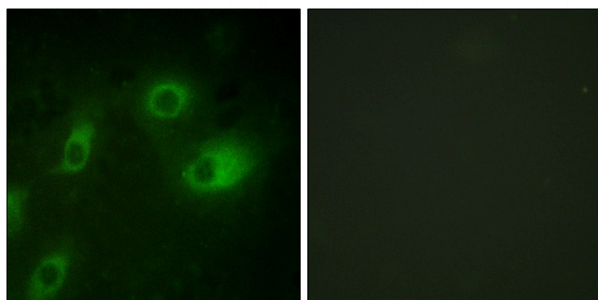
Western blot analysis of 3T3 293T using p-Cytokeratin 18 (S52) antibody. Antibody was diluted at 1:500



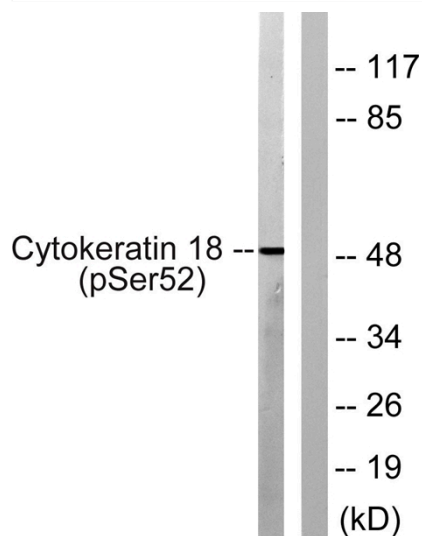
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Keratin 18 (Phospho-Ser52) Antibody



Immunofluorescence analysis of HeLa cells, using Keratin 18 (Phospho-Ser52) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells, using Keratin 18 (Phospho-Ser52) Antibody. The lane on the right is blocked with the phospho peptide.