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Anti-Cytokeratin 8 Picoband Antibody

Catalog # ABO10184

Product Information

Application	WB, IHC-P
Primary Accession	P05787
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Keratin, type II cytoskeletal 8(KRT8) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3856
Other Names	Keratin, type II cytoskeletal 8, Cytokeratin-8, CK-8, Keratin-8, K8, Type-II keratin Kb8, KRT8, CYK8
Calculated MW	53704
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm . Nucleus, nucleoplasm . Nucleus matrix .
Tissue Specificity	Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma membrane in structures that contain dystrophin and spectrin. Expressed in gingival mucosa and hard palate of the oral cavity. .
Source	Eukaryota
Protein Name	Keratin, type II cytoskeletal 8
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human Cytokeratin 8 recombinant protein (Position: D107-K325). Human Cytokeratin 8 shares 95.4% and 94.5% amino acid (aa) sequence identity with mouse and rat Cytokeratin 8, respectively.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

Name	KRT8 (HGNC:6446)
Synonyms	CYK8
Function	Structural component of intermediate filaments in simple epithelial cells. Together with its obligate type I partner KRT18, contributes to the formation of the keratin intermediate filament network that provides mechanical stability and resilience to epithelial cells (PubMed:26823019). Also involved in maintaining epithelial integrity and protecting cells from non-mechanical stress, such as apoptosis (By similarity). Also required for ARHGEF40-mediated actin stress fiber formation and tensional force-induced stress fiber formation and reinforcement (PubMed:26823019). In striated muscle, together with KRT19, may contribute to linking the contractile apparatus to dystrophin at the costameres (PubMed:16000376).
Cellular Location	Cytoplasm. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:Q10758}. Nucleus matrix {ECO:0000250|UniProtKB:Q10758}. Cytoplasm, cytoskeleton
Tissue Location	Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma membrane in structures that contain dystrophin and spectrin. Expressed in gingival mucosa and hard palate of the oral cavity.

Background

Keratin, type II cytoskeletal 8, also known as cytokeratin-8 (CK-8) or keratin-8 (K8) is a keratin protein that is encoded in humans by the KRT8 gene. This gene is a member of the type II keratin family clustered on the long arm of chromosome 12. Type I and type II keratins heteropolymerize to form intermediate-sized filaments in the cytoplasm of epithelial cells. The product of this gene typically dimerizes with keratin 18 to form an intermediate filament in simple single-layered epithelial cells. This protein plays a role in maintaining cellular structural integrity and also functions in signal transduction and cellular differentiation. Mutations in this gene cause cryptogenic cirrhosis. Alternatively spliced transcript variants have been found for this gene.

Images

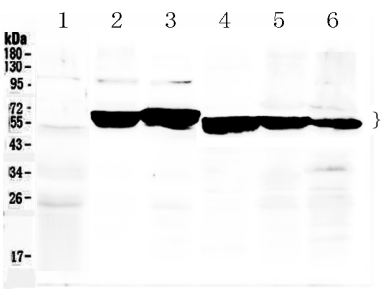


Figure 1. Western blot analysis of Cytokeratin 8 using anti- Cytokeratin 8 antibody (ABO10184). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: mouse ovary tissue lysates, Lane 3: mouse liver tissue lysates, Lane 4: MCF-7 whole cell lysates,Lane 5: A549 whole cell lysates,Lane 6: HELA whole Cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit

anti- Cytokeratin 8 antigen affinity purified polyclonal antibody (Catalog # ABO10184) at 0.5 □¼g/mL overnight at 4 □°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Cytokeratin 8 at approximately 54KD, 56KD. The expected band size for Cytokeratin 8 is at 54KD.

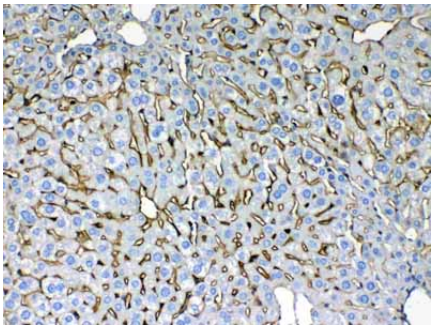


Figure 2. IHC analysis of Cytokeratin 8 using anti-Cytokeratin 8 antibody (ABO10184).Cytokeratin 8 was detected in paraffin-embedded section of mouse liver tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti- Cytokeratin 8 Antibody (ABO10184) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

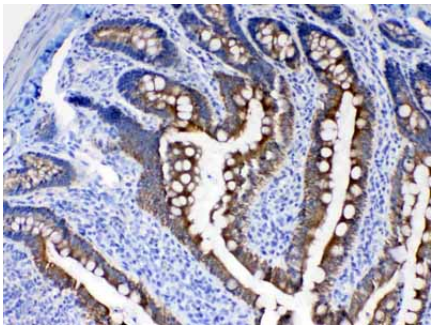


Figure 3. IHC analysis of Cytokeratin 8 using anti-Cytokeratin 8 antibody (ABO10184).Cytokeratin 8 was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti- Cytokeratin 8 Antibody (ABO10184) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

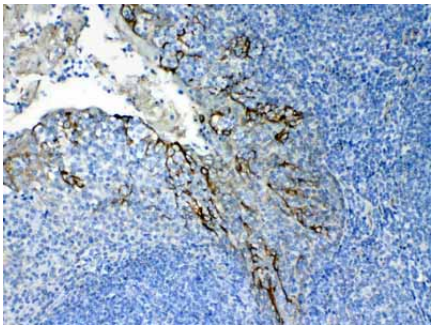
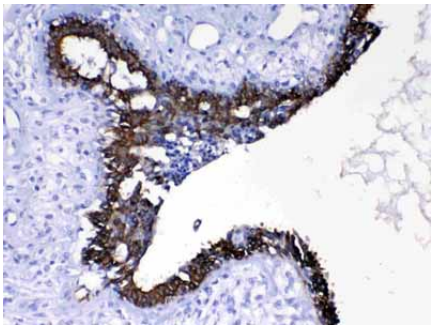


Figure 4. IHC analysis of Cytokeratin 8 using anti-Cytokeratin 8 antibody (ABO10184).Cytokeratin 8 was detected in paraffin-embedded section of human tonsil tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti- Cytokeratin 8 Antibody (ABO10184) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Figure 5. IHC analysis of Cytokeratin 8 using anti-Cytokeratin 8 antibody (ABO10184).Cytokeratin 8 was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with



10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti- Cytokeratin 8 Antibody (ABO10184) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.