

# Anti-Cytokeratin 8 Picoband Antibody

Catalog # ABO10184

#### Specification

# Anti-Cytokeratin 8 Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP05787HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit 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.

## Anti-Cytokeratin 8 Picoband Antibody - 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 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br> <br> Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

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.

**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.

## Anti-Cytokeratin 8 Picoband Antibody - Protein Information

Name KRT8

Synonyms CYK8

Function

Together with KRT19, helps to link the contractile apparatus to dystrophin at the costameres of striated muscle.

Cellular Location Cytoplasm. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:Q10758}. Nucleus matrix {ECO:0000250|UniProtKB:Q10758}

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.

## Anti-Cytokeratin 8 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Cytokeratin 8 Picoband Antibody - 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  $\hat{l}_{4}$ g/mL overnight at 4ŰC, 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 11<sup>1</sup>/<sub>4</sub>g/ml rabbit anti- Cytokeratin 8 Antibody (ABO10184) overnight at 4ŰC. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. 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 1Î<sup>1</sup>/4g/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 11<sup>1</sup>/4g/ml rabbit anti- Cytokeratin 8 Antibody (ABO10184) overnight at 4ŰC. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. 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  $1^{1/4}$ g/ml rabbit anti- Cytokeratin 8 Antibody (ABO10184) overnight at 4ŰC. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

#### Anti-Cytokeratin 8 Picoband Antibody - 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.