10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Cytokeratin 8 (Phospho-S73) Antibody

Catalog # AP59603

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P05787
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53704

Additional Information

Gene ID	3856
Other Names	CYK8; Keratin, type II cytoskeletal 8; Cytokeratin-8; CK-8; Keratin-8; K8; Type-II keratin Kb8
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S73 of human Cytokeratin 8 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

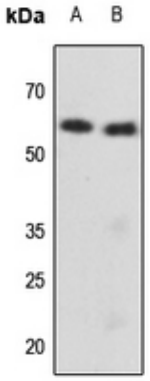
Name	KRT8 (HGNC:6446)
Synonyms	CYK8
Function	Structural component of intermediate filaments in simple epithelial cells. Together with its obligate type I partner KRT18, contributes to the formation of the keratin intermediate filament network that provides mechanical stability and resilience to epithelial 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

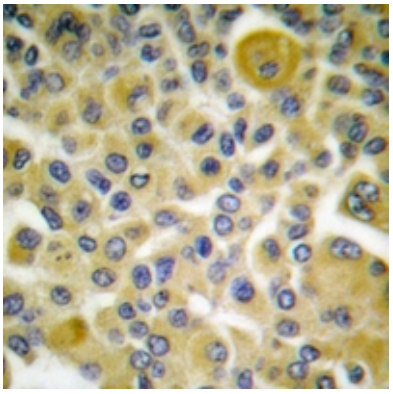
Tissue Location

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.

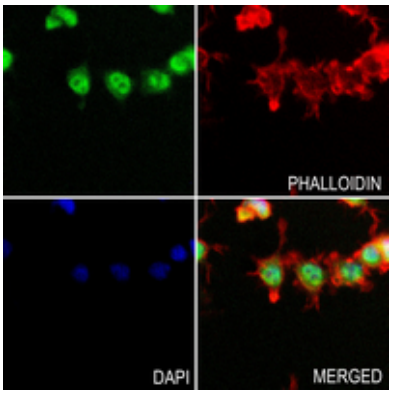
Images



Western blot analysis of Cytokeratin 8 (Phospho-S73) expression in mouse kidney (A), rat kidney (B) whole cell lysates. (Predicted band size: 53 kD; Observed band size: 55 kD)



Immunohistochemical analysis of Cytokeratin 8 (Phospho-S73) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Cytokeratin 8 (Phospho-S73) staining in RAW264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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