

# CK5 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1699a

## Product Information

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<b>Application</b>	WB, IHC, FC, ICC, E
<b>Primary Accession</b>	<a href="#">P13647</a>
<b>Reactivity</b>	Human, Mouse, Monkey
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	2C2
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	62378
<b>Description</b>	The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in the basal layer of the epidermis with family member KRT14. Mutations in these genes have been associated with a complex of diseases termed epidermolysis bullosa simplex. The type II cytokeratins are clustered in a region of chromosome 12q12-q13.
<b>Immunogen</b>	Purified recombinant fragment of human CK5 expressed in E. Coli.
<b>Formulation</b>	Purified antibody in PBS with 0.05% sodium azide

## Additional Information

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<b>Gene ID</b>	3852
<b>Other Names</b>	Keratin, type II cytoskeletal 5, 58 kDa cytokeratin, Cytokeratin-5, CK-5, Keratin-5, K5, Type-II keratin Kb5, KRT5
<b>Dilution</b>	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1:10~50 ICC~~N/A E~~1/10000
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	CK5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	KRT5
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<b>Function</b>	Required for the formation of keratin intermediate filaments in the basal epidermis and maintenance of the skin barrier in response to mechanical stress (By similarity). Regulates the recruitment of Langerhans cells to the epidermis, potentially by modulation of the abundance of macrophage chemotactic cytokines, macrophage inflammatory cytokines and CTNND1 localization in keratinocytes (By similarity).
<b>Cellular Location</b>	Cytoplasm.
<b>Tissue Location</b>	Expressed in corneal epithelium (at protein level) (PubMed:26758872). Expressed in keratinocytes (at protein level) (PubMed:20128788, PubMed:31302245).

## References

Am J Surg Pathol. 2009 Nov;33(11):1615-23. J Dermatol. 2009 Aug;36(8):447-52.

## Images

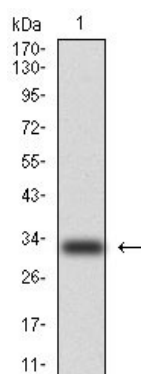


Figure 1: Western blot analysis using CK5 mAb against human CK5 (AA: 158-272) recombinant protein. (Expected MW is 33.3 kDa)

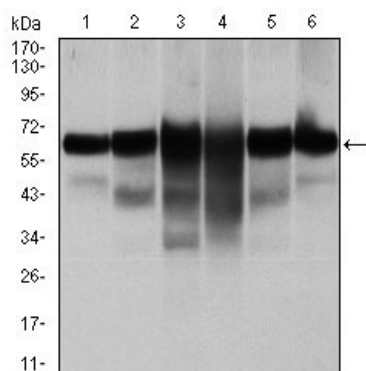


Figure 2: Western blot analysis using CK5 mouse mAb against A431 (1), MCF-7 (2), HeLa (3), HepG2 (4), 3T3-L1 (5), and COS-7 (6) cell lysate.

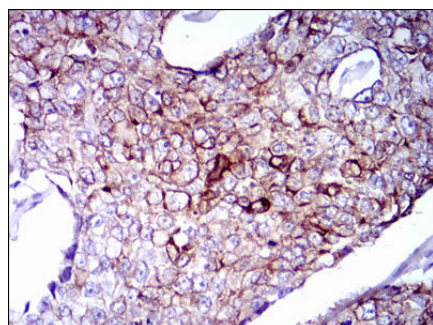


Figure 3: Immunohistochemical analysis of paraffin-embedded breast cancer tissues using CK5 mouse mAb with DAB staining.

Figure 4: Immunohistochemical analysis of paraffin-embedded stomach cancer tissues using CK5 mouse mAb with DAB staining.

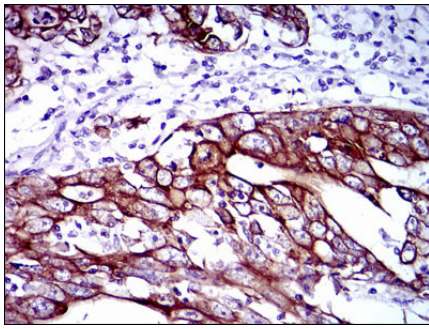


Figure 5: Immunofluorescence analysis of HeLa cells. Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

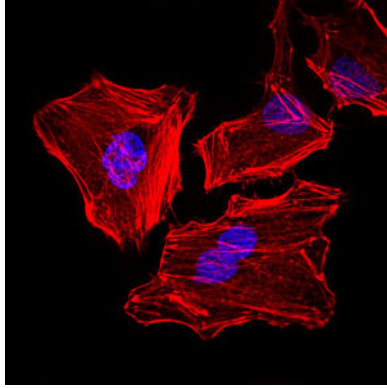
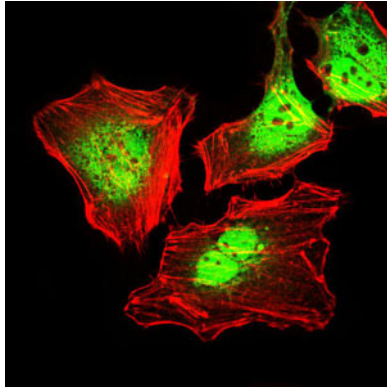


Figure 6: Immunofluorescence analysis of HeLa cells using CK5 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



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