

## Product datasheet for **AM50628PU-S**

### Cytokeratin 5 Mouse Monoclonal Antibody [Clone ID: AT12C4]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	AT12C4
Applications:	ELISA, FC, IF, IHC, WB
Recommended Dilution:	<b>ELISA.</b> <b>Western blot.</b> <b>Flow cytometry:</b> <b>Immunofluorescence/Immunocytochemistry.</b> <b>Immunohistochemistry on Paraffin Sections.</b>
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Recombinant human KRT5 (1-590aa) purified from E. coli.
Formulation:	Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol. State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein-A affinity chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	keratin 5
Database Link:	<a href="#">Entrez Gene 3852 Human P13647</a>



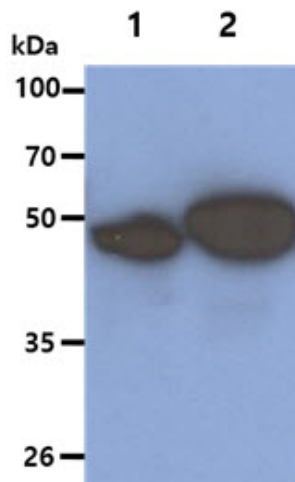
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**Background:**

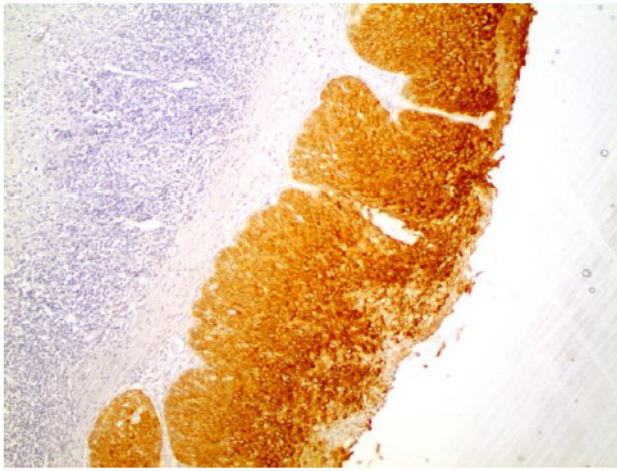
Keratin 5, also known as KRT5, K5, or CK5, dimerizes with keratin 14 and forms the intermediate filaments(IF) that make up the cytoskeleton of basal epithelial cells. This protein is involved in several diseases including epidermolysis bullosa simplex and breast and lung cancers. Keratin 5(and K14) are expressed primarily in basal keratinocytes in the epidermis, specifically in the stratified epithelium lining the skin and digestive tract. Keratin intermediate filaments make up the cytoskeletal scaffold within epithelial cells, which contributes to the cell architecture and provides the cells with the ability to withstand mechanical, and non-mechanical, stresses. K5/K14 keratin pairs are able to undergo extensive bundling due to the non-helical tail of K15 acting as a weak cross-linker at the intermediate filament surface. This bundling increase the elasticity, and therefore the mechanical resilience, of the intermediate filaments.

**Synonyms:**

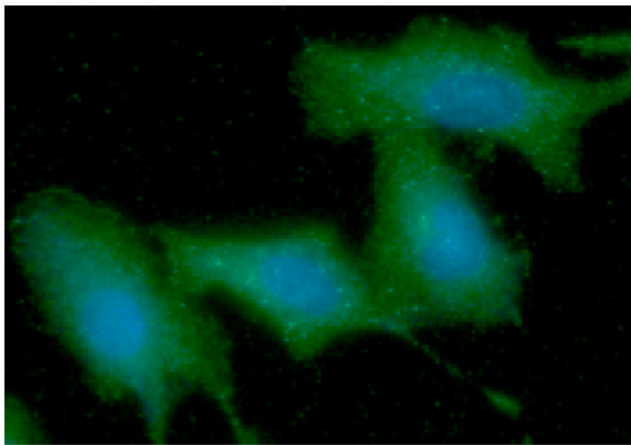
KRT5, Cytokeratin-5, Keratin-5, Keratin 5, CK5, K5

**Product images:**

The Cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human KRT5 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1. : HeLa cell lysate  
Lane 2. : A431 cell lysate



**Immunohistochemistry:** Paraffin embedded sections of human cervical cancer tissue were incubated with anti-human KRT5 (1:200) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB)



**Immunofluorescence:** ICC/IF analysis of KRT5 in A549 cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human KRT5 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).