

**Product Name:** KO-Validated Keratin 7 Recombinant Rabbit Monoclonal Antibody  
**Catalog #:** KVAb00137

For research use only.

## Summary

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,FCM,ICC,IHC-P                                                            |
| <b>Reactivity</b>   | Human,Rat                                                                   |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Rabbit IgG                                                                  |
| <b>Clonality</b>    | Rabbit mAb                                                                  |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

## Application

|                         |                                                                            |
|-------------------------|----------------------------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200 |
| <b>Molecular Weight</b> | Calculated MW: 51.4kDa                                                     |

## Antigen Information

|                          |                                                                                                                                                                                                |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | KRT7<br>KRT7; Keratin 7; CK-7; SCL; K7; Keratin, Type II Cytoskeletal 7; Sarcolectin 2; K2C7 2; CK7 2;                                                                                         |
| <b>Alternative Names</b> | Keratin, 55K Type II; Cytoskeletal; Type-II Keratin Kb7; Keratin 7, Type II; Cytokeratin 7;<br>Keratin, Simple Epithelial Type I, K7; Type II Mesothelial Keratin K7; Cytokeratin-7; Keratin-7 |
| <b>Gene ID</b>           | 3855.0                                                                                                                                                                                         |
| <b>SwissProt ID</b>      | P08729                                                                                                                                                                                         |
| <b>Immunogen</b>         | A synthesized peptide derived from human Cytokeratin 7                                                                                                                                         |

## Background

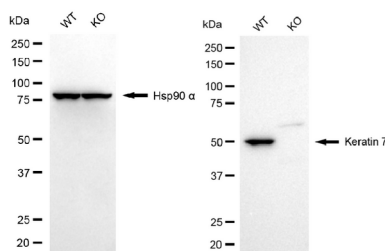
The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified

epithelial tissues. This type II cytokeratin is specifically expressed in the simple epithelia lining the cavities of the internal organs and in the gland ducts and blood vessels. The genes encoding the type II cytokeratins are clustered in a region of chromosome 12q12-q13. Alternative splicing may result in several transcript variants; however, not all variants have been fully described. [provided by RefSeq, Jul 2008]

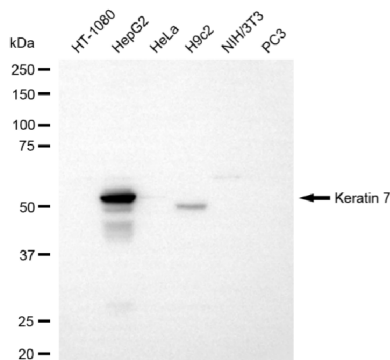
## Research Area

Signal Transduction

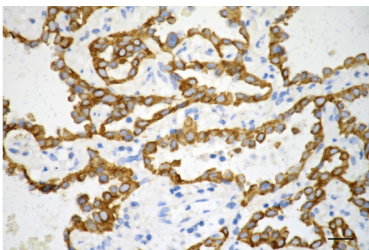
## Image Data



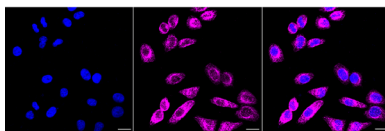
Western blotting analysis using keratin 7 antibody (KVA00137). Keratin 7 expression in wild type (WT) and keratin 7 (KRT7) knockout (KO) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with keratin 7 antibody (KVA00137, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



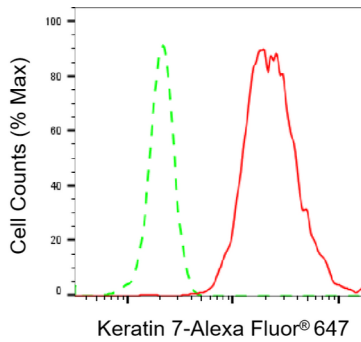
Western blotting analysis using keratin 7 antibody (KVA00137). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with keratin 7 antibody (KVA00137, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human lung adenocarcinoma using keratin 7 antibody (KVA00137, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with Keratin 7 antibody (KVA00137, 1:1,000). Nuclei were stained blue with DAPI; Keratin 7 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.



Flow cytometric analysis of Keratin 7 expression in HepG2 cells using Keratin 7 antibody (KVA00137, 1:2,000). Green, isotype control; red, Keratin 7.