# Kallikrein 7 Antibody for IHC / KLK7 Immunohistochemistry Antibody [clone MSVA-707M] (V6106)

| Catalog No. | Formulation | Size |
|---|---|---|
| V6106-100UG | Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide | 100 ug |
| V6106-20UG | Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide | 20 ug |

Recombinant | MOUSE MONOCLONAL

**Bulk quote request**

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| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Recombinant Mouse Monoclonal |
| **Isotype** | Mouse IgG2b, kappa |
| **Clone Name** | MSVA-707M |
| **UniProt** | P49862 |
| **Localization** | Secreted |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml |
| **Limitations** | This Kallikrein 7 Antibody for IHC / KLK7 Immunohistochemistry Antibody is available for research use only. |




Kallikrein 7 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Kallikrein 7 / KLK7 in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using mouse monoclonal antibody clone MSVA-707M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates cytoplasmic localization in epithelial structures, with strongest staining observed in epidermal and keratinizing epithelia, consistent with expression in differentiated keratinocytes, while most non-epithelial tissues remain largely negative. Within tumor tissue microarrays, staining is observed in squamous and keratinizing epithelial tumors, reflecting epithelial differentiation patterns. Evaluation across large TMA panels enables direct comparison of KLK7 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported Kallikrein 7 expression profiles in the Human Protein Atlas and support its role in epidermal barrier function and desquamation.

## Description

Kallikrein 7 (KLK7) is a secreted serine protease encoded by the KLK7 gene and belongs to the tissue kallikrein family of trypsin-like proteases. Kallikrein 7 is also referred to as stratum corneum chymotryptic enzyme (SCCE) and plays an important role in epidermal biology by regulating proteolytic processes involved in skin barrier turnover. The Kallikrein 7 Antibody for IHC / KLK7 Antibody supports immunohistochemistry detection of KLK7 protein in tissue sections where this protease participates in epithelial differentiation and desquamation.

KLK7 expression is strongly associated with stratified epithelial tissues, particularly within the epidermis where differentiated keratinocytes secrete this protease into the extracellular environment of the stratum corneum. Through proteolytic cleavage of corneodesmosomal proteins, KLK7 contributes to controlled shedding of corneocytes during normal epidermal renewal. Immunohistochemistry detection of KLK7 frequently highlights suprabasal and differentiated keratinocyte populations, making a Kallikrein 7 antibody useful for studies examining epidermal maturation, barrier formation, and skin homeostasis.

Alterations in KLK7 expression or protease activity have been linked to inflammatory skin disorders including atopic dermatitis and psoriasis, where dysregulated kallikrein activity may disrupt epidermal barrier integrity. Increased KLK7 activity can promote excessive degradation of corneodesmosomal structures, leading to abnormal desquamation and barrier dysfunction. Because of this role in epidermal proteolysis, KLK7 immunohistochemistry analysis using a Kallikrein 7 antibody can assist investigations of skin disease mechanisms and epidermal differentiation pathways.

KLK7 has also been studied in several epithelial cancers where altered expression may contribute to tumor invasion and extracellular matrix remodeling. Elevated KLK7 levels have been reported in malignancies such as ovarian cancer and pancreatic cancer, suggesting that this protease may participate in proteolytic pathways that influence tumor progression. Detection of KLK7 protein using immunohistochemistry therefore supports research examining kallikrein protease activity in both normal epithelial biology and tumor associated remodeling processes.

This recombinant mouse monoclonal antibody clone MSVA-707M recognizes Kallikrein 7 and is suitable for immunohistochemistry based detection of KLK7 expression in tissue specimens. In addition to immunohistochemistry applications, antibody specificity has been evaluated using protein microarray analysis containing thousands of human proteins, supporting selective recognition of the intended KLK7 target. A Kallikrein 7 antibody suitable for IHC therefore provides a useful tool for studying epidermal differentiation, epithelial tissue biology, and kallikrein protease expression in histological samples.

This KLK7 antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

## Application Notes

1. Optimal dilution of the Kallikrein 7 Antibody for IHC / KLK7 Immunohistochemistry Antibody should be determined by the researcher.

2. This KLK7 / Kallikrein 7 antibody is recombinantly produced by expression in CHO cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

## Immunogen

A recombinant fragment of human KLK7 protein (around amino acids 1-200) (exact sequence is proprietary) was used as the immunogen for the KLK7 / Kallikrein 7 antibody for IHC.

## Storage

Kallikrein 7 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

## Alternate Names

KLK7 antibody, Kallikrein 7 antibody, Kallikrein-7 antibody, Kallikrein related peptidase 7 antibody, Stratum corneum chymotryptic enzyme antibody, SCCE antibody, Serine protease KLK7 antibody


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