Cytokeratin 6A Monoclonal Antibody (LHK6B)

Catalog Number MA5-14127

**Details**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>500 µL</td>
</tr>
<tr>
<td>Host/Isotope</td>
<td>Mouse / IgG2a</td>
</tr>
<tr>
<td>Class</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Type</td>
<td>Antibody</td>
</tr>
<tr>
<td>Clone</td>
<td>LHK6B</td>
</tr>
<tr>
<td>Immunogen</td>
<td>A synthetic peptide (GSSTIKYTTTS) from the C-terminus of human keratin 6</td>
</tr>
<tr>
<td>Conjugate</td>
<td>Unconjugated</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Concentration</td>
<td>0.2 mg/mL</td>
</tr>
<tr>
<td>Purification</td>
<td>Protein A</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>PBS, pH 7.4, with 0.2% BSA</td>
</tr>
<tr>
<td>Contains</td>
<td>0.09% sodium azide</td>
</tr>
<tr>
<td>Storage Conditions</td>
<td>4°C</td>
</tr>
</tbody>
</table>

**Species Reactivity**

- **Species reactivity**: Human, Mouse
- **Published species**: Human, Mouse

**Tested Applications**

- **Immunohistochemistry (IHC)**: Assay-dependent
- **Western Blot (WB)**: See 2 publications below
- **Immunohistochemistry (IHC)**: See 14 publications below
- **Miscellaneous PubMed (Misc)**: See 1 publications below
- **Neutralization (Neu)**: See 1 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

**Published Applications**

- **Western Blot (WB)**: See 2 publications below
- **Immunohistochemistry (IHC)**: See 14 publications below
- **Miscellaneous PubMed (Misc)**: See 1 publications below
- **Neutralization (Neu)**: See 1 publications below

**Product specific information**

MA5-14127 targets Cytokeratin 6 in FN applications and shows reactivity with Human and mouse samples. The MA5-14127 immunogen is a synthetic peptide (GSSTIKYTTTS) from the C-terminus of human keratin 6.

**Background/Target Information**

Keratins 6 and 16 are expressed in keratinocytes, which are undergoing rapid turnover in the suprabasal region (also known as hyperproliferation-related keratins). Keratin 6 is found in hair follicles, suprabasal cells of a variety of internal stratified epithelia, in epidermis, in both normal and hyperproliferative situations. Epidermal injury results in activation of keratinocytes which express CK6 and CK16. CK6 is strongly expressed in about 75% of head and neck squamous cell carcinomas. Expression of CK6 is particularly associated with differentiation.

### PubMed References For Cytokeratin 6A Monoclonal Antibody (LHK6B)

#### 2 Western Blot References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse / 1:200</td>
<td>MA5-14127 was used in western blot to study the effect on the morphology of head and neck squamous cell carcinoma cells of EGF-mediated regulation of cytokeratin expression.</td>
</tr>
</tbody>
</table>

*Cell and tissue research (Jan 2013; 351: 59)*

**“Epidermal growth factor-induced modulation of cytokeratin expression levels influences the morphological phenotype of head and neck squamous cell carcinoma cells.”**


**PubMed Article URL:** http://dx.doi.org/10.1007/s00441-012-1500-y

<table>
<thead>
<tr>
<th>Human / Not Cited</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA514127 was used in western blot to explore the contribution of epithelial cells to systemic sclerosis pathogenesis.</td>
<td></td>
</tr>
</tbody>
</table>

*The Journal of experimental medicine (Apr 2017; 214: 1129)*

**“Epithelial Fli1 deficiency drives systemic autoimmunity and fibrosis: Possible roles in scleroderma.”**


**PubMed Article URL:** http://dx.doi.org/10.1084/jem.20160247

#### 14 Immunohistochemistry References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / 10 ng/mL</td>
<td>MA5-14127 was used in immunohistochemistry to investigate the influence of zidovudine on gingival epithelium growth.</td>
</tr>
</tbody>
</table>

*HIV medicine (May 2012; 13: 276)*

**“Effect of the HIV nucleoside reverse transcriptase inhibitor zidovudine on the growth and differentiation of primary gingival epithelium.”**

**Author(s):** Mitchell D, Israr M, Alam S, Kimel J, Dinello D, Meyers C

**PubMed Article URL:** http://dx.doi.org/10.1011/i.1468-1293.2011.00973.x

<table>
<thead>
<tr>
<th>Human / Not Cited</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA5-14127 was used in immunohistochemistry to investigate the expression profile of cytokeratins in cutaneous amyloids.</td>
<td></td>
</tr>
</tbody>
</table>

*Archives of dermatological research (Jul 2004; 296: 83)*

**“A study of cytokeratin profiles in localized cutaneous amyloids.”**

**Author(s):** Chang Y, Liu HN, Wang W, Lee DD, Tsai SF

**PubMed Article URL:** http://dx.doi.org/10.1007/s00403-004-0474-3

<table>
<thead>
<tr>
<th>Human / Not Cited</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA5-14127 was used in immunohistochemistry to study human X-linked severe combined immunodeficiency and thymic dendritic and epithelial cell development.</td>
<td></td>
</tr>
</tbody>
</table>

*Clinical immunology (Orlando, Fla.) (Jan 2004; 110: 63)*

**“Abnormal development of thymic dendritic and epithelial cells in human X-linked severe combined immunodeficiency.”**

**Author(s):** Hale LP, Buckley RH, Puck JM, Patel DD

**PubMed Article URL:** http://dx.doi.org/10.1016/j.clim.2003.09.002

<table>
<thead>
<tr>
<th>Mouse / 1:100</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA5-14127 was used in immunohistochemistry to study the multiple functions of Snail family genes during mouse palate development.</td>
<td></td>
</tr>
</tbody>
</table>


**“Multiple functions of Snail family genes during palate development in mice.”**

**Author(s):** Murray SA, Oram KF, Gridley T

**PubMed Article URL:** http://dx.doi.org/10.1242/dev.02837

<table>
<thead>
<tr>
<th>Human / 1:1000</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA5-14127 was used in immunohistochemistry to use bioengineering techniques to develop a murine skin humanized psoriasis model.</td>
<td></td>
</tr>
</tbody>
</table>

*Methods in molecular biology (Clifton, N.J.) (Jun 2013; 961: 305)*

**“Bioengineered skin humanized model of psoriasis.”**

**Author(s):** Carretero M, Guerrero-Aspizua S, Del Rio M

**PubMed Article URL:** http://dx.doi.org/10.1007/978-1-62703-227-8_20
MA5-14127 was used in immunohistochemistry to study the expression of keratin 4 and keratin 13 in oral squamous cell carcinoma and epithelial dysplasia.

Human / Not Cited

Histopathology (Mar 2011; 58: 531)
"Down-regulation of keratin 4 and keratin 13 expression in oral squamous cell carcinoma and epithelial dysplasia: a clue for histopathogenesis."
Author(s):Sakamoto K, Aragaki T, Morita K, Kawachi H, Kayamori K, Nakanishi S, Omura K, Miki Y, Okada N, Katsube K, Takizawa T, Yamaguchi A
PubMed Article URL:http://dx.doi.org/10.1002/mc.20119

Mouse / 1:100

Physiological genomics (Jun 2013; 45: 409)
"Keratin gene expression profiles after digit amputation in C57BL/6 vs. regenerative MRL mice imply an early regenerative keratinocyte activated-like state."
Author(s):Cheng CH, Leferovich J, Zhang XM, Bedelbaeva K, Gourevitich D, Hatcher CJ, Basson CT, Heber-Katz E, Marx KA
PubMed Article URL:http://dx.doi.org/10.1152/physiogenomics.00142.2012

MA5-14127 was used in immunohistochemistry to study the expression pattern of keratins in C57BL/6 mice and MRL regenerative mice before and after amputation of the middle digit.

Mouse / 1:100

Human / Not Cited

MA5-14127 was used in immunohistochemistry to study the regulation of epithelial cell differentiation and human thymic medulla Hassall body formation by corticosteroids.

Human / Not Cited

Journal of immunology (Baltimore, Md.: 1950) (Jan 2004; 172: 617)
"Corticosteroids regulate epithelial cell differentiation and Hassall body formation in the human thymus."
Author(s):Hale LP, Markert ML
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.172.1.617

MA5-14127 was used in immunohistochemistry to study the effects of an HIV protease inhibitor on the gingival epithelium.

Human / 1:100

Cell and tissue research (Oct 2006; 326: 69)
"New skin-equivalent model from de-epithelialized amnion membrane."
Author(s):Yang L, Shirakata Y, Shudou M, Dai X, Tokumaru S, Hirakawa S, Sayama K, Hamuro J, Hashimoto K
PubMed Article URL:http://dx.doi.org/10.1002/s00441-006-0208-2

MA5-14127 was used in immunohistochemistry to develop a living skin-equivalent from de-epithelialized amnion membrane.

Human / 10 ng/ml

HIV medicine (Mar 2011; 12: 145)
"The HIV protease inhibitor lopinavir/ritonavir (Kalera) alters the growth, differentiation and proliferation of primary gingival epithelial."
Author(s):Israr M, Mitchell D, Alam S, Dinello D, Kishel JJ, Meyers C
PubMed Article URL:http://dx.doi.org/10.1111/j.1468-1293.2010.00863.x

MA5-14127 was used in immunohistochemistry to use organotypic gingival keratinocyte culture to explore the effects of HIV nucleoside reverse transcriptase inhibitors on the gingival epithelium.

Human / Not Cited

HIV medicine (Apr 2014; 15: 196)
"HIV nucleoside reverse transcriptase inhibitors efavirenz and tenofovir change the growth and differentiation of primary gingival epithelium."
Author(s):Mitchell D, Israr M, Alam S, Dinello D, Kishel J, Jia R, Meyers C
PubMed Article URL:http://dx.doi.org/10.1111/hiv.12100

MA5-14127 was used in immunohistochemistry to study the role of novel keratin 79-positive migratory epithelial cells in hair canal morphogenesis and regeneration.

Mouse / 1:100

Development (Cambridge, England) (Dec 2013; 140: 4870)
"Keratin 79 identifies a novel population of migratory epithelial cells that initiates hair canal morphogenesis and regeneration."
Author(s):Veniaminova NA, Vagnozzi AN, Kopinke D, Do TT, Murtaugh LC, Maillard I, Dlugosz AA, Reiter JF, Wong SY
PubMed Article URL:http://dx.doi.org/10.1242/dev.101725

MA5-14127 was used in immunohistochemistry to study the expression profile of medroxyprogesterone- and DMBA-induced multilayered mammary tumors.

Mouse / 1:200

Humoral carcinogenesis (Sep 2005; 44: 42)
"Characterization of medroxyprogesterone and DMBA-induced multilayered mammary tumors by gene expression profiling."
Author(s):Yin Y, Bai R, Russell RG, Beildeck ME, Xie Z, Kopelovich L, Glazer RI
PubMed Article URL:http://dx.doi.org/10.1002/mc.20119


Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale; as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation"). Our claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, products are not suitable for use in applications regulated by FDA or any other regulatory agency.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S SOLE REMEDY FOR BREACH OF WARRANTY IS REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER INSTALLATION OR USE. THE PRODUCT(S) ARE SOLD "AS IS" AND "WHERE IS" AND WITHOUT WARRANTY OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

**NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT.**

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus
MA5-14127 was used in immunohistochemistry to develop and evaluate a mouse model for pachyonychia congenita

The Journal of investigative dermatology (May 2011; 131: 1053)
"Development of skin-humanized mouse models of pachyonychia congenita."
Author(s): Garcia M, Larcher F, Hickerson RP, Baselsa E, Leachman SA, Kaspar RL, Del Rio M
PubMed Article URL: http://dx.doi.org/10.1038/jid.2010.353

1 Miscellaneous PubMed References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / Not Cited</td>
<td>MA5-14127 was used in immunohistochemistry (paraffin) to describe the molecular pathologic characteristics of urothelial carcinomas subtypes.</td>
</tr>
</tbody>
</table>

The American journal of pathology (Sep 2013; 183: 681)
"Toward a molecular pathologic classification of urothelial carcinoma."
PubMed Article URL: http://dx.doi.org/10.1016/j.ajpath.2013.05.013

1 Neutralization References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / Not Cited</td>
<td>MA5-14127 was used in blocking or activating experiment to study the role of Ku70/80 and DNA-PK in regulating RAG-mediated cleavage and the significance for the 12/23 rule specificity</td>
</tr>
</tbody>
</table>

The Journal of biological chemistry (Jul 2004; 279: 29821)
"Ku70/Ku80 and DNA-dependent protein kinase catalytic subunit modulate RAG-mediated cleavage: implications for the enforcement of the 12/23 rule."
Author(s): Sawchuk DJ, Mansilla-Soto J, Alarcon C, Singha NC, Langen H, Bianchi ME, Lees-Miller SP, Nussenzweig MC, Cortes P
PubMed Article URL: http://dx.doi.org/10.1074/jbc.M403706200