Product Datasheet

Anti-Cytokeratin 10 antibody [DE-K10] ab9026

Overview

Product name: Anti-Cytokeratin 10 antibody [DE-K10]
Description: Mouse monoclonal [DE-K10] to Cytokeratin 10
Host species: Mouse
Specificity: Reacts with keratinizing stratified epithelia and in differentiated areas of highly differentiated squamous cell carcinomas.

Tested applications: Suitable for: IHC-Fr, ICC, IHC-P, WB, Flow Cyt
Species reactivity: Reacts with: Mouse, Sheep, Cat, Dog, Human, Frog
Immunogen: Cytoskeletal preparation extracted from human epidermis

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer: Preservative: 0.09% Sodium azide
Constituent: PBS
Purity: Protein G purified
Clonality: Monoclonal
Clone number: DE-K10
Myeloma: Sp2/0
Isotype: IgG1
Light chain type: kappa

Applications

Our Abpromise guarantee covers the use of ab9026 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
### Target

<table>
<thead>
<tr>
<th>Tissue specificity</th>
<th>Involvement in disease</th>
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<tbody>
<tr>
<td><strong>Defects in KRT10 are a cause of bullous congenital ichthyosiform erythroderma (BCIE) [MIM:113800]; also known as epidermolytic hyperkeratosis (EHK) or bullous erythroderma ichthyosiformis congenita of Brocq. BCIE is an autosomal dominant skin disorder characterized by widespread blistering and an ichthyotic erythroderma at birth that persist into adulthood. Histologically there is a diffuse epidermolytic degeneration in the lower spinous layer of the epidermis. Within a few weeks from birth, erythroderma and blister formation diminish and hyperkeratoses develop.</strong></td>
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<tr>
<td><strong>Defects in KRT10 are a cause of ichthyosis annular epidermolytic (AEI) [MIM:607602]; also known as cyclic ichthyosis with epidermolytic hyperkeratosis. AEI is a skin disorder resembling bullous congenital ichthyosiform erythroderma. Affected individuals present with bullous ichthyosis in early childhood and hyperkeratotic lichenified plaques in the flexural areas and extensor surfaces at later ages. The feature that distinguishes AEI from BCIE is dramatic episodes of flares of annular polycyclic plaques with scale, which coalesce to involve most of the body surface and can persist for several weeks or even months.</strong></td>
<td></td>
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</tbody>
</table>

| Sequence similarities | Belongs to the intermediate filament family. |

### Images

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-Fr</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>ICC</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC-P</td>
<td>★★★★☆☆☆☆</td>
<td>1/100.</td>
</tr>
<tr>
<td>WB</td>
<td>★★★★★☆☆☆☆</td>
<td>1/100 - 1/1000.</td>
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| Flow Cyt    |           | 1/100 - 1/200.  
  *ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.* |
Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 10 antibody [DE-K10] (ab9026)

IHC image on a frozen section of dog skin showing its strong reactivity in the keratinizing epidermal cells.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Cytokeratin 10 antibody [DE-K10] (ab9026)

IHC image of ab9026 staining in Human cervix formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab9026, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.
Mesenchymal-epidermal interactions assessed by heterologous organotypic co-cultures (OTC). Heterologous OTC consisting of mice deficient for cathepsin L +/+ fibroblasts in collagen type I gels topped by normal human primary keratinocytes were grown air-exposed for 7 days. Paraffin sections were stained in haematoxylin and eosin (HE) or by immunohistochemistry for the proliferation marker Ki67 (Ki67, brown nuclear staining) and the differentiation markers cytokeratin 10 (K10, ab9026 1/100 dilution, brown staining) and transglutaminase (TG, brown staining). Bar 100 µm.

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