**Overview**

**Product name**  Anti-Filaggrin antibody

**Description**  Rabbit polyclonal to Filaggrin

**Host species**  Rabbit

**Specificity**  ab81468 reacts specifically with the human 435 kDa protein.

**Tested applications**  Suitable for: IHC-Fr, IHC-P, WB, ICC/IF

**Species reactivity**  Reacts with: Human

**Immunogen**  Synthetic peptide derived from the N terminal domain of human Filaggrin

**General notes**  We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result, we are pleased to offer this antibody in a purified format as of 23rd June 2017. The following lots are still unpurified and still in stock as of 23rd June 2017 - GR309720-5, GR3178284-1, GR309720-6, GR309720-2, GR309720-3, GR309720-4. Lot numbers other than GR309720-5, GR3178284-1, GR309720-6, GR309720-2, GR309720-3, GR309720-4 will be purified. Please note that the dilutions may need to be adjusted accordingly. Purified antibodies have the advantage of being enriched for the fraction of immunoglobulin that specifically reacts with the target antigen and for having a reduction of serum proteins.

**Properties**

- **Form**  Liquid
- **Storage instructions**  Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
- **Storage buffer**  Constituents: 2% Sucrose, 1.21% Tris, 0.75% Glycine
- **Purity**  Protein A purified
- **Clonality**  Polyclonal
- **Isotype**  IgG

**Applications**

Our Abpromise guarantee covers the use of ab81468 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
**Function**
Aggregates keratin intermediate filaments and promotes disulfide-bond formation among the intermediate filaments during terminal differentiation of mammalian epidermis.

**Tissue specificity**
Keratohyalin granules.

**Involvement in disease**
Ichthyosis vulgaris  
Dermatitis atopic 2

**Sequence similarities**
Belongs to the S100-fused protein family.  
Contains 2 EF-hand domains.  
Contains 23 filaggrin repeats.

**Post-translational modifications**
Filaggrin is initially synthesized as a large, insoluble, highly phosphorylated precursor containing many tandem copies of 324 AA, which are not separated by large linker sequences. During terminal differentiation it is dephosphorylated and proteolytically cleaved. The N-terminal of the mature protein is heterogeneous, and is blocked by the formation of pyroglutamate. Undergoes deimination of some arginine residues (citrullination).

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-Fr</td>
<td></td>
<td>1/200 - 1/1000.</td>
</tr>
<tr>
<td>IHC-P</td>
<td>★★★★☆</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

**Target**

**Images**

ab81468 staining Filaggrin in Human skin tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 2% BSA for 10 minutes at 21°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/250) for 2 hours at 21°C. A Biotin-conjugated Goat anti-rabbit IgG polyclonal (1/300) was used as the secondary antibody.

Image courtesy of Carl Hobbs by Abreview.
Immunocytochemistry/ Immunofluorescence - Anti-Filaggrin antibody (ab81468)

 ICC/IF image of ab81468 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab81468, 1/1000 dilution) overnight at +4°C. The secondary antibody (green) was ab96899, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Immunohistochemistry (Frozen sections) - Anti-Filaggrin antibody (ab81468)

Image cropped from Kiritsi et al., Orphanet Journal of Rare Diseases, 1, 33, Fig. 2.; doi: 10.1186/1750-1172-9-33 Reproduced under the Creative Commons license https://creativecommons.org/licenses/by/2.0/

Immunohistochemical analysis of Human skin sample labeling filaggrin with ab81468. Counterstained with haematoxylin.

Please note: All products are “FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES”

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.
Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors