

## Product datasheet

# Anti-hair cortex Cytokeratin/K40 antibody [AE13] ab16113

★★★★★ [7 Abreviews](#) [36 References](#) [2 Images](#)

### Overview

<b>Product name</b>	Anti-hair cortex Cytokeratin/K40 antibody [AE13]
<b>Description</b>	Mouse monoclonal [AE13] to hair cortex Cytokeratin/K40
<b>Host species</b>	Mouse
<b>Specificity</b>	This antibody is specific for the family of hair cortex keratins.
<b>Tested applications</b>	<b>Suitable for:</b> IHC-Fr, IHC-P, WB, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Full length native protein (purified) corresponding to Human hair cortex Cytokeratin/K40.
<b>General notes</b>	<p>This antibody is an excellent marker for hair and nail differentiation.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.1% Sodium azide</p> <p>Constituent: PBS</p>
<b>Purity</b>	Protein G purified
<b>Primary antibody notes</b>	This antibody is an excellent marker for hair and nail differentiation.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	AE13
<b>Myeloma</b>	P3x63-Ag8.653

Isotype

IgG1

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab16113 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr	★★★★★ (4)	Use at an assay dependent concentration.
IHC-P	★★★★★ (3)	Use at an assay dependent concentration.
WB		1/1000. Detects a band of approximately 44 kDa (predicted molecular weight: 44 - 46 kDa).
Flow Cyt		1/20 - 1/50. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

### Function

May play a role in late hair differentiation.

### Tissue specificity

Expressed in skin and scalp. Also very weakly expressed in tongue, breast, colon and small intestine. In the hair follicle, it is specifically present in the upper hair cuticle. Not present in the upper cortex (at protein level).

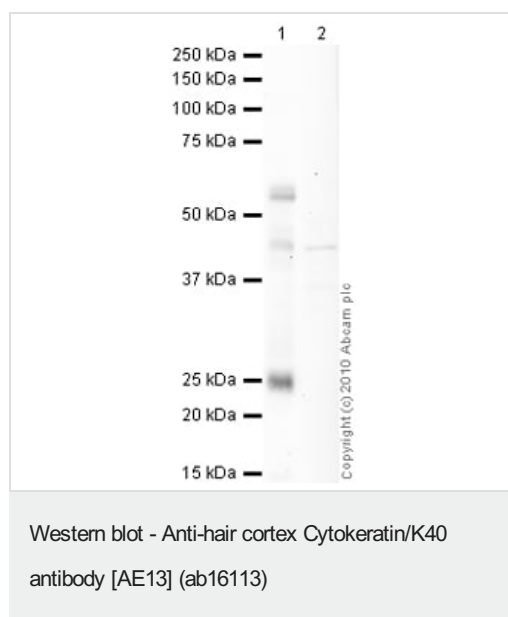
### Sequence similarities

Belongs to the intermediate filament family.

### Developmental stage

During differentiation of the hair, it is one of the last keratins expressed.

## Images



**All lanes** : Anti-hair cortex Cytokeratin/K40 antibody [AE13]  
(ab16113) at 1 µg/ml

**Lane 1** : Mouse skin tissue lysate (14 days) (**ab7271**)

**Lane 2** : Caco 2 (Human colonic carcinoma cell line) Whole Cell  
Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Goat Anti-Mouse IgG H&L (HRP) preadsorbed  
(**ab97040**) at 1/5000 dilution

Developed using the ECL technique.

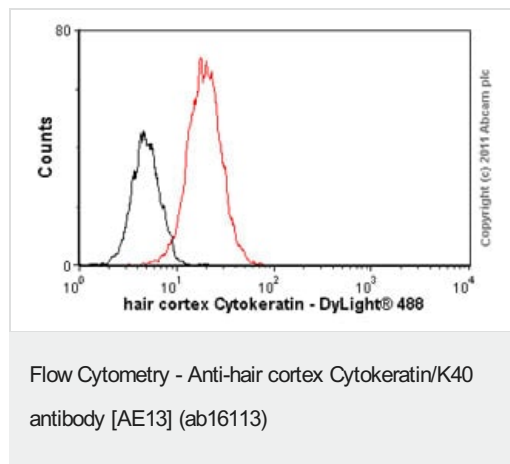
Performed under reducing conditions.

**Predicted band size:** 44 - 46 kDa

**Observed band size:** 44 kDa

**Additional bands at:** 25 kDa, 55 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 20 minutes



Overlay histogram showing A431 cells stained with ab16113 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab16113, 1/20 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in A431 cells fixed with 100% methanol (5 min)/permeabilized in 0.1% PBS-Triton used under the same conditions.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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