


## Product datasheet

# Alexa Fluor® 555 Anti-Keratin 12/K12 antibody [EPR17882] ab222916

Recombinant RabMAb

## 2 Images

### Overview

<b>Product name</b>	Alexa Fluor® 555 Anti-Keratin 12/K12 antibody [EPR17882]
<b>Description</b>	Alexa Fluor® 555 Rabbit monoclonal [EPR17882] to Keratin 12/K12
<b>Host species</b>	Rabbit
<b>Conjugation</b>	Alexa Fluor® 555. Ex: 555nm, Em: 565nm
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Recombinant fragment within Human Keratin 12/K12 aa 250 to the C-terminus. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <b>contact</b> our Scientific Support team to discuss your requirements. Database link: <a href="#">Q99456</a>
<b>Positive control</b>	ICC/IF: Hek293T cells transfected with GFP-tagged Keratin 12/K12.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>.</p> <p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to</p>

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## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 1% BSA, 30% Glycerol (glycerin, glycerine), PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR17882
<b>Isotype</b>	IgG

## Applications

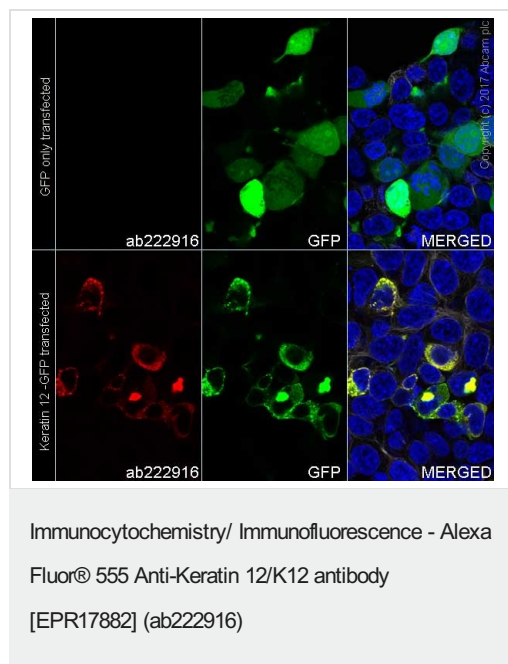
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab222916 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100. This product gave a positive signal in Hek293T cells transfected with GFP-tagged Keratin 12 / K12 fixed with 4% formaldehyde (10 min)

## Target

<b>Function</b>	May play a unique role in maintaining the normal corneal epithelial function. Together with KRT3, essential for the maintenance of corneal epithelium integrity.
<b>Tissue specificity</b>	Cornea specific.
<b>Involvement in disease</b>	Defects in KRT12 are a cause of Meesmann corneal dystrophy (MECD) [MIM:122100]; also abbreviated MCD and known as juvenile epithelial corneal dystrophy of Meesmann. MECD is an autosomal dominant disease that causes fragility of the anterior corneal epithelium. Patients are usually asymptomatic until adulthood when rupture of the corneal microcysts may cause erosions, producing clinical symptoms such as photophobia, contact lens intolerance and intermittent diminution of visual acuity. Rarely, subepithelial scarring causes irregular corneal astigmatism and permanent visual impairment. Histological examination shows a disorganized and thickened epithelium with widespread cytoplasmic vacuolation and numerous small, round, debris-laden intraepithelial cysts.

## Images



ab222916 staining Keratin 12/K12 in Hek293T cells transfected with GFP-tagged Keratin 12/K12 expression construct or GFP-only-tagged expression construct. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h.

The cells were then incubated overnight at +4°C with ab222916 at 1/100 dilution (**pseudocolored in red**) and **ab195884**, Rat monoclonal to Tubulin (Alexa Fluor® 647), at 1/250 dilution (**pseudocolored in white**). Nuclear DNA was labelled with DAPI (shown in blue) and GFP is shown in green.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Why choose a recombinant antibody?

- Research with confidence**  
Consistent and reproducible results
- Long-term and scalable supply**  
Recombinant technology
- Success from the first experiment**  
Confirmed specificity
- Ethical standards compliant**  
Animal-free production

Alexa Fluor® 555 Anti-Keratin 12/K12 antibody [EPR17882] (ab222916)

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

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