

Product datasheet

APC Anti-CD133 antibody [293C3] ab253259

1 Image

Overview

<b>Product name</b>	APC Anti-CD133 antibody [293C3]
<b>Description</b>	APC Mouse monoclonal [293C3] to CD133
<b>Host species</b>	Mouse
<b>Conjugation</b>	APC. Ex: 645nm, Em: 660nm

Tested Applications & Species

Application	Species
Flow Cyt	 Human

[See all applications and species data](#) ↓

<b>Immunogen</b>	The details of the immunogen for this antibody are not available.
<b>Epitope</b>	ab253259 recognizes the epitope 2 on human CD133 (CD133/2). This antibody is important for identification of human renal progenitors
<b>Positive control</b>	Flow Cyt: Human peripheral blood.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Store In the Dark.
<b>Storage buffer</b>	pH: 7.4 Preservative: 0.0975% Sodium azide Constituent: PBS
<b>Purity</b>	Size exclusion
<b>Purification notes</b>	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	293C3
<b>Isotype</b>	IgG2b


## Applications

### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of **ab253259** in the following tested applications.

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

 <b>Guaranteed</b> Tested applications are guaranteed to work and covered by our Abpromise guarantee.	 <b>Predicted</b> Predicted to work for this combination of applications and species but not guaranteed.	 <b>Incompatible</b> Does not work for this combination of applications and species.
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Application	Species
Flow Cyt	 Human

Application	Abreviews	Notes
Flow Cyt		Use 10µl for 10 <sup>6</sup> cells. Or 10 µL per 100 µL whole blood.

## Target

### Function

May play a role in cell differentiation, proliferation and apoptosis (PubMed:24556617). Binds cholesterol in cholesterol-containing plasma membrane microdomains and may play a role in the organization of the apical plasma membrane in epithelial cells. During early retinal development acts as a key regulator of disk morphogenesis. Involved in regulation of MAPK and Akt signaling pathways. In neuroblastoma cells suppresses cell differentiation such as neurite outgrowth in a RET-dependent manner (PubMed:20818439).

### Tissue specificity

Isoform 1 is selectively expressed on CD34 hematopoietic stem and progenitor cells in adult and fetal bone marrow, fetal liver, cord blood and adult peripheral blood. Isoform 1 is not detected on other blood cells. Isoform 1 is also expressed in a number of non-lymphoid tissues including retina, pancreas, placenta, kidney, liver, lung, brain and heart. Found in saliva within small membrane particles. Isoform 2 is predominantly expressed in fetal liver, skeletal muscle, kidney, and heart as well as adult pancreas, kidney, liver, lung, and placenta. Isoform 2 is highly expressed in fetal liver, low in bone marrow, and barely detectable in peripheral blood. Isoform 2 is expressed on hematopoietic stem cells and in epidermal basal cells (at protein level). Expressed in adult retina by rod and cone photoreceptor cells (at protein level).

### Involvement in disease

Retinitis pigmentosa 41  
Cone-rod dystrophy 12  
Stargardt disease 4  
Retinal macular dystrophy 2

### Sequence similarities

Belongs to the prominin family.

### Post-translational modifications

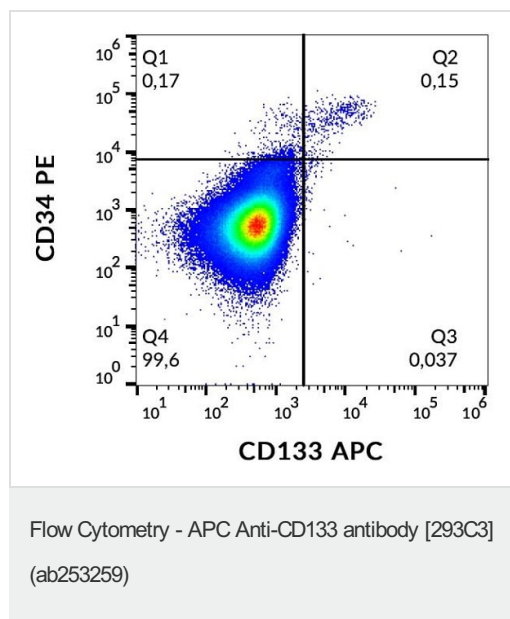
Isoform 1 and isoform 2 are glycosylated.  
Acetylation at Lys-225, Lys-257 and Lys-264 by NAT8 and NAT8B may control PROM1 protein expression and its function in cell apoptosis.

### Cellular localization

Apical cell membrane. Cell projection, microvillus membrane. Cell projection, cilium, photoreceptor outer segment. Endoplasmic reticulum. Endoplasmic reticulum-Golgi intermediate compartment. Found in extracellular membrane particles in various body fluids such as cerebrospinal fluid, saliva, seminal fluid and urine.

## Images

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Flow cytometric analysis of human peripheral blood cells labeling CD133 with ab253259.

Surface staining.

**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

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- 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.

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