abcam

Product datasheet

PE Anti-CD133 antibody [EPR20980-104] ab252128

Recombinant

RabMAb

2 Images

Overview

Product name PE Anti-CD133 antibody [EPR20980-104]

Description PE Rabbit monoclonal [EPR20980-104] to CD133

Host species Rabbit

Conjugation PE. Ex: 488nm, Em: 575nm

Tested applications Suitable for: Flow Cyt Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control Flow Cytometry: NCCIT (Positive control). HEK293 (Negative control).

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply - Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at +4°C. Store

In the Dark.

Storage buffer pH: 7.4

> Preservative: 0.02% Sodium azide Constituents: 1% BSA. PBS

Purity Protein A purified

Clonality Monoclonal Clone number EPR20980-104

Isotype lgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab252128 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
Flow Cyt		1/1000.

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
Belongs to the prominin family.

Sequence similarities Post-translational

lsoform 1 and isoform 2 are glycosylated.

modifications

Acetylation at Lys-225, Lys-257 and Lys-264 by NAT8 and NAT8B may control PROM1 protein expression and its function in cell apoptosis.

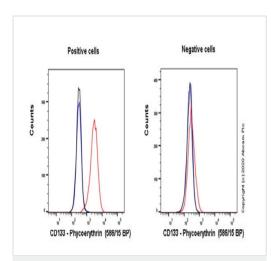
Cellular localization

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.

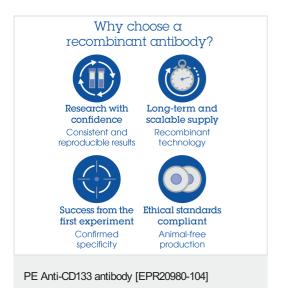
Images



Flow Cytometry - PE Anti-CD133 antibody [EPR20980-104] (ab252128) Overlay histogram showing left NCCIT positive cells and right negative HEK293 cells stained with ab252128 (red line). The cells were incubated in 1x PBS containing 10 % normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab252128) (1x 10^6 in 100μ l at $0.5~\mu$ g/ml (1/1000)) for 30 min on ice.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Phycoerythrin (<u>ab209478</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm) and 586/15 bandpass filter.



(ab252128)

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