abcam

## Product datasheet

# Alexa Fluor® 488 Anti-CD133 antibody [EPR20980-104] ab252126

Recombinant RabMAb

1 References 2 Images

### Overview

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|---|---|
| **Product name** | Alexa Fluor® 488 Anti-CD133 antibody [EPR20980-104] |
| **Description** | Alexa Fluor® 488 Rabbit monoclonal [EPR20980-104] to CD133 |
| **Host species** | Rabbit |
| **Conjugation** | Alexa Fluor® 488. Ex: 495nm, Em: 519nm |
| **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 cyt: NCCIT cells. |
| **General notes** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.<br>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 provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or **outlicensing@thermofisher.com**. |

## Properties

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| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark. |
| **Storage buffer** | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS |
| **Purity** | Protein A purified |
| **Clonality** | Monoclonal |
| **Clone number** | EPR20980-104 |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab252126 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** | | 1/2500. |

## Target

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| **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<br>Cone-rod dystrophy 12<br>Stargardt disease 4<br>Retinal macular dystrophy 2 |
| **Sequence similarities** | Belongs to the prominin family. |

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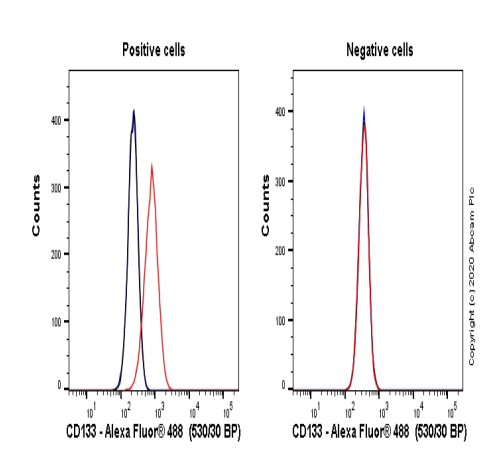
| **Post-translational modifications** | Isoform 1 and isoform 2 are glycosylated.<br>Acetylation at Lys-225, Lys-257 and Lys-264 by NAT8 and NAT8B may control PROM1 protein expression and its function in cell apoptosis. |
| **Cellular localization** | Apical cell membrane. Cell projection, microvillus 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

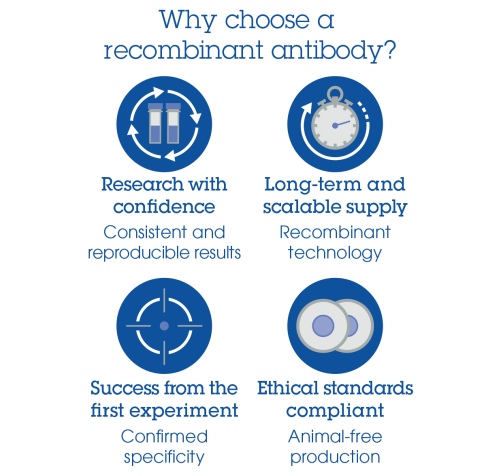



Flow Cytometry - Alexa Fluor® 488 Anti-CD133 antibody [EPR20980-104] (ab252126)

Overlay histogram showing left NCCIT positive cells and right negative HEK-293 cells stained with ab252126 (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 (ab252126) (1x $10^6$ in 100µl at 0.2 µg/ml (1/2500)) for 30 min on ice.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor 488 ® (**ab199091**) 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 Blue laser (488nm) and 530/30 bandpass filter.




Alexa Fluor® 488 Anti-CD133 antibody [EPR20980-104] (ab252126)

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