

Anti-CD133 antibody [mAbcam27699] α b27699

★★★★☆ [6 Abreviews](#) [10 References](#) [1 Image](#)

Overview

Product name	Anti-CD133 antibody [mAbcam27699]
Description	Mouse monoclonal [mAbcam27699] to CD133
Host species	Mouse
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 400 - 500 of Mouse CD133. Read Abcam's proprietary immunogen policy (Peptide available as ab31714 .)
Positive control	WB: Mouse kidney tissue lysate.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</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&As</p>

Properties

Form	Liquid
Storage instructions	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	mAbcam27699
Myeloma	Sp2

Isotype	IgG2b
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab27699 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
WB	★★★★★ (1)	Use a concentration of 5 - 10 µg/ml. Detects a band of approximately 120 kDa (predicted molecular weight: 97 kDa).

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).

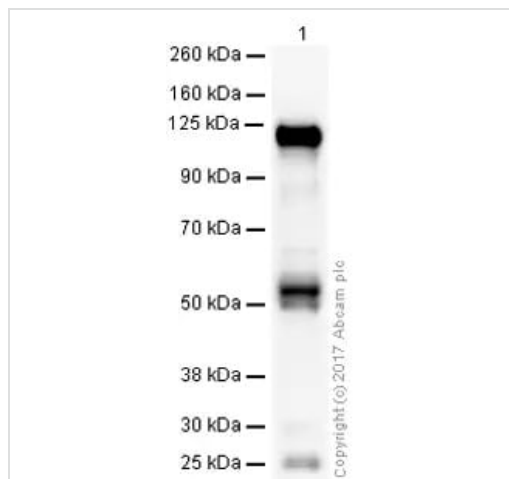
Involvement in disease Retinitis pigmentosa 41
Cone-rod dystrophy 12
Stargardt disease 4
Retinal macular dystrophy 2

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



Western blot - Anti-CD133 antibody [mAbcam27699]
(ab27699)

Anti-CD133 antibody [mAbcam27699] (ab27699) at 5 µg + Mouse kidney tissue lysate at 20 µg

Secondary

HRP conjugated goat anti-mouse at 1/5000 dilution

Predicted band size: 97 kDa

Observed band size: 120 kDa

Additional bands at: 55 kDa (possible IgG)

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 55 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab27699 overnight at 4°C. Antibody binding was detected using a goat anti-mouse antibody conjugated to HRP, and visualised using ECL development solution [ab133406](#).

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