Anti-CD133 Antibody

ER31008

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, FC
Molecular Wt:	Predicted band size: 97 kDa

Description: This gene encodes a pentaspan transmembrane glycoprotein. The protein localizes to membrane protrusions and is often expressed on adult stem cells, where it is thought to function in maintaining stem cell properties by suppressing differentiation. Mutations in this gene have been shown to result in retinitis pigmentosa and Stargardt disease. Expression of this gene is also associated with several types of cancer. This gene is expressed from at least five alternative promoters that are expressed in a tissue-dependent manner. Multiple transcript variants encoding different isoforms have been found for this gene.

Immunogen: Recombinant protein within human CD133 aa 179-389.

Positive control: Hela cell lysate, SW480 cell lysate, HCT116 cell lysate, HT-29 cell lysate, HepG2 cell lysate, 293 cell lysate, human breast tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: O43490 Human

Recommended Dilutions:

WB	1:500-1:1,000
IHC-P	1:500-1:1,000
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

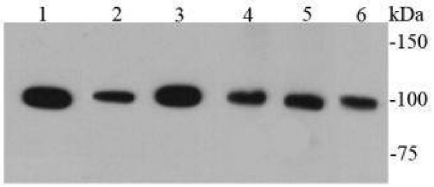

Fig1: Western blot analysis of CD133 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ER31008, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

Positive control:

Lane 1: Hela cell lysate
Lane 2: SW480 cell lysate
Lane 3: HCT116 cell lysate
Lane 4: HT-29 cell lysate
Lane 5: HepG2 cell lysate
Lane 6: 293 cell lysate

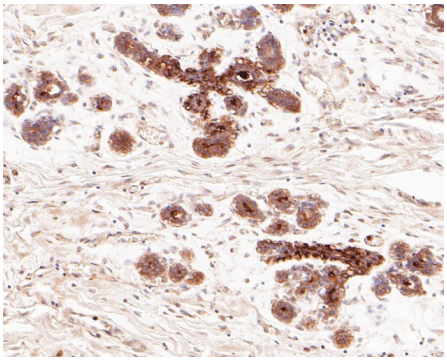

Fig2: Immunohistochemical analysis of paraffin-embedded human breast tissue using anti-CD133 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ER31008, 1/800) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

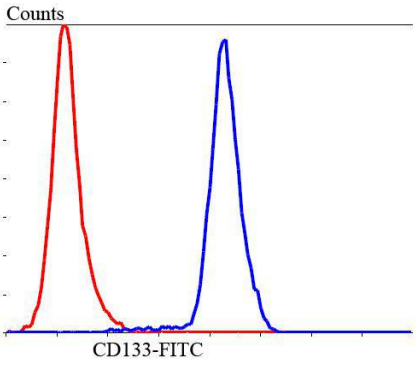

Fig3: Flow cytometric analysis of SHG-44 cells with CD133 antibody at 1/100 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Goat anti rabbit IgG (FITC) was used as the secondary antibody.

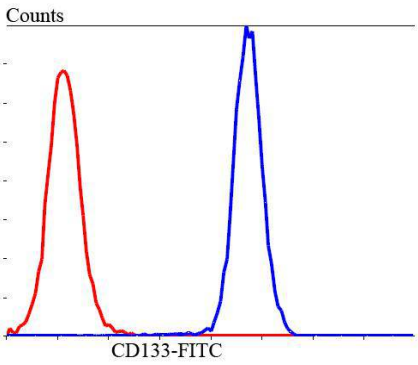

Fig4: Flow cytometric analysis of HUVEC cells with CD133 antibody at 1/100 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Goat anti rabbit IgG (FITC) was used as the secondary antibody.

Background References

1. Yin AH, Miraglia S, Zanjani ED,et al. CD133, a novel marker for human hematopoietic stem and progenitor cells. Blood,1997; 90:5002-5012
2. Wuchter C,Ratei R,Spahn G,et al. Impact of CD133 (CD133) and CD90 expression analysis for acute leukemia immunophenotyping. Haematologica, 2001; 86:154-161
3. Kuci S,Schumn M,Schlegel PG,et al. Phenotypic and functional characterization of mobilized peripheral blood CD133+CD34+ hematopoietic stem cell. Blood,1999; 94(Suppl 1):559a.