Anti-CD133 Antibody

0804-5

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, FC
Molecular Wt:	Predicted band size 97 kDa.

Description: CD133 antigen, also known as prominin-1, is a glycoprotein that in humans is encoded by the PROM1 gene. It is a member of pentaspan transmembrane glycoproteins, which specifically localize to cellular protrusions. When embedded in the cell membrane, the membrane topology of prominin-1 is such that the N-terminus extends into the extracellular space and the C-terminus resides in the intracellular compartment. The protein consists of five transmembrane segments, with the first and second segments and the third and fourth segments connected by intracellular loops while the second and third as well as fourth and fifth transmembrane segments are connected by extracellular loops. While the precise function of CD133 remains unknown, it has been proposed that it acts as an organizer of cell membrane topology. CD133 is expressed in hematopoietic stem cells, endothelial progenitor cells, glioblastoma, neuronal and glial stem cells, various pediatric brain tumors, as well as adult kidney, mammary glands, trachea, salivary glands, uterus, placenta, digestive tract, testes, and some other cell types.

Immunogen: Synthetic peptide within human CD133 aa 800-865.

Positive control: Human stomach tissue lysates, PC-12 cell lysates, F9.

Subcellular location: Cell membrane.

Database links: SwissProt: O43490 Human | O54990 Mouse

Recommended Dilutions:

WB	1:500
FC	1:50-1:100

Storage Buffer: 1*TBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

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

Purity: Immunogen affinity purified.

Images

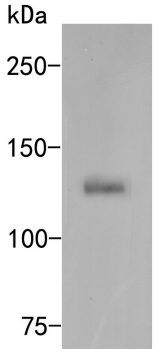

Fig1: Western blot analysis of CD133 on human stomach tissue lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ER1901-63, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

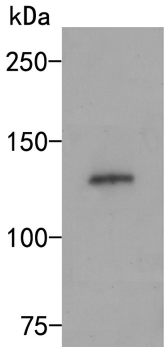

Fig2: Western blot analysis of CD133 on PC-12 cell lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ER1901-63, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

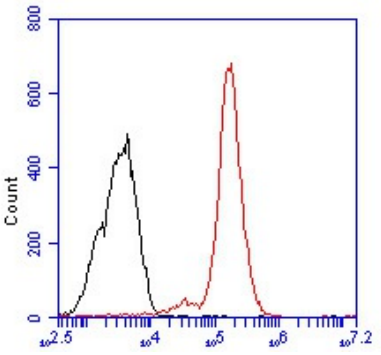

Fig3: Flow cytometric analysis of CD133 was done on F9 cells. The cells were fixed, permeabilized and stained with the primary antibody (0804-5, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Takenobu H. et al. CD133 suppresses neuroblastoma cell differentiation via signal pathway modification. Oncogene 30:97-105(2011).