Revision 1

Store at +4C

#38725

CD133 (A8N6N) Mouse mAb (Alexa Fluor® 488 Conjugate)

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
FC-L	H	Endogenous	Mouse IgG3	#O43490	8842

Product Usage Information

Application	Dilution
Flow Cytometry (Live)	1:50

Storage

Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.

Specificity/Sensitivity

CD133 (A8N6N) Mouse mAb (Alexa Fluor® 488 Conjugate) recognizes endogenous levels of total CD133 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with cells overexpressing human CD133 protein.

Description

This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 488 fluorescent dye and tested in-house for direct flow cytometric analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated CD133 (A8N6N) Mouse mAb #60577.

Background

CD133, also known as Prominin, was first described as a cell surface marker recognized by monoclonal antibody AC133 on putative hematopoietic stem cells (1). Subsequent cDNA cloning indicated that CD133 is a five-transmembrane protein with a predicted molecular weight of 97 kDa. Due to heavy glycosylation, its apparent molecular weight is 130 kDa as determined by SDS-PAGE analysis (2). Besides blood stem cells, CD133 is expressed on and used to isolate other stem cells, including cancer stem cells (3-7). A deletion mutation in CD133 produces aberrant protein localization and may result in retinal degeneration in humans (8).

Background References

1. Yin, A.H. et al. (1997) *Blood* 90, 5002-12.
2. Miraglia, S. et al. (1997) *Blood* 90, 5013-21.
3. Handgretinger, R. et al. (2003) *Ann N Y Acad Sci* 996, 141-51.
4. Monzani, E. et al. (2007) *Eur J Cancer* 43, 935-46.
5. O'Brien, C.A. et al. (2007) *Nature* 445, 106-10.
6. Ricci-Vitiani, L. et al. (2007) *Nature* 445, 111-5.
7. Singh, S.K. et al. (2004) *Nature* 432, 396-401.
8. Maw, M.A. et al. (2000) *Hum. Mol. Genet.* 9, 27-34.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

FC-L: Flow Cytometry (Live)

Cross-Reactivity Key

H: Human

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