For Research Use Only

CD133 Monoclonal antibody

Catalog Number:66666-1-Ig 24 Publications

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Basic Information

Catalog Number:
66666-1-Ig

Size:
150ul , Concentration: 1000 μg/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG13327

GenBank Accession Number:
BC012089

GeneID (NCBI):
8842

Full Name:
prominin 1

Calculated MW:
97 kDa

Observed MW:
115 kDa, 80-90 kDa

Purification Method:
Protein G purification

CloneNo.:
2B8A2

Recommended Dilutions:
WB 1:2000-1:10000
IHC 1:500-1:2000

Applications

Tested Applications:
FC, IHC, WB,ELISA

Cited Applications:
IF, IHC, WB

Species Specificity:
Human

Cited Species:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HT-29 cells, Caco-2 cells

IHC : human kidney tissue, human breast cancer tissue, human colon cancer tissue

Background Information

CD133, also known as PROM1 (prominin-1) or AC133, belongs to the prominin family. CD133 is a transmembrane glycoprotein with an NH2-terminal extracellular domain, five transmembrane loops and a cytoplasmic tail. The expression of CD133 has been reported in hematopoietic stem cells, endothelial progenitor cells, neuronal and glial stem cells, suggesting the potential role of CD133 as a cell surface marker of adult stem cells. CD133 has also been reported as a marker of cancer stem cells in various human tumors. CD133 is a highly glycosylated protein with an apparent molecular weight of 115-120 kDa. After the treatment of the lysates with glycosidase, CD133 shifted to a protein with an apparent molecular weight of 80-90 kDa (PMID: 23150174; 20068153).

Notable Publications

Author	Pubmed ID	Journal	Application
Ting Tang	33173989	Mol Med Rep	IF
Chaoqun Liu	34551797	J Exp Clin Cancer Res	WB,IF
Peng Zhang	30326469	Cell Physiol Biochem	WB,IHC

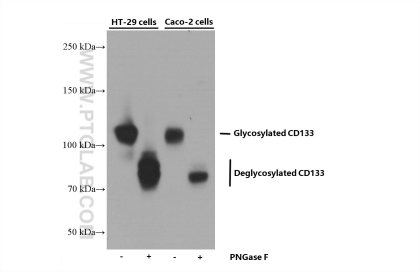
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

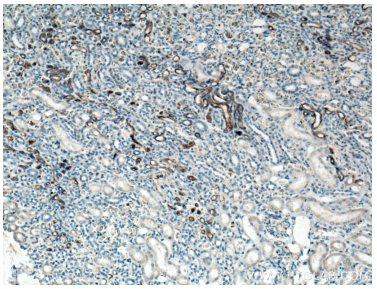
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

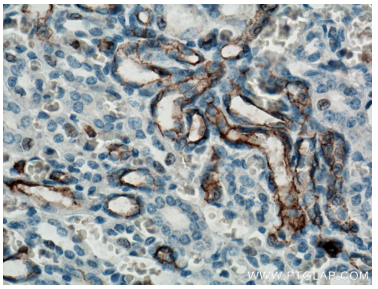
Selected Validation Data



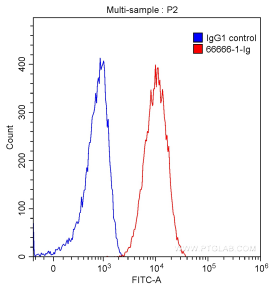
Untreated and PNGase F-treated lysates of HT-29 cells and Caco-2 cells were subjected to SDS PAGE followed by western blot with 66666-1-Ig (CD133 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66666-1-Ig (CD133 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66666-1-Ig (CD133 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 HT-29 cells were stained with 0.20 ug Anti-Human CD133 (66666-1-Ig, Clone:2B8A2) (red) or 0.20 ug isotype control antibody (blue) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1000. Cells were fixed with 90% MeOH.