

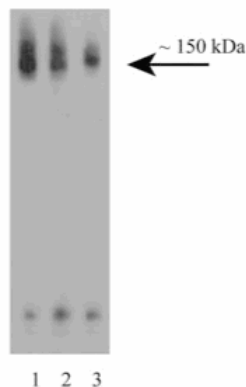
Technical Data Sheet

Purified Mouse Anti-CD100**Product Information**

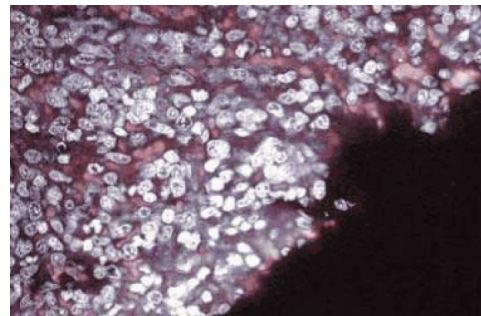
Material Number:	610671
Alternate Name:	Semaphorin 4D; Sema 4D
Size:	150 µg
Concentration:	250 µg/ml
Clone:	30/CD100
Immunogen:	Human CD100 aa. 721-861
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat
Target MW:	150 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

CD100 was originally described as a 150 kDa surface T-cell antigen induced after T-cell activation. Human CD100 exhibits widespread gene expression but is most prominent in peripheral lymphocytes, thymus, skeletal muscle, and brain. The full CD100 protein is 862 amino acids with homology to the semaphorin family of proteins at its extracellular domain followed by a short Ig-like domain. The short cytoplasmic domain contains a putative tyrosine phosphorylation site which may be the site for association with intracellular kinases. Cells that overexpress CD100 induce a rapid aggregation of B cells and increase the CD90L-B cell aggregation. Because semaphorins are axon-guiding molecules for the nervous system, it has been proposed that CD100 may have a guidance role in the immune system.



Western blot analysis of CD100 on a Jurkat cell lysate (Human T-cell leukemia; ATCC TIB-152). 1 µg/mL (lane 1), 0.5 µg/mL (lane 2), 0.25 µg/mL (lane 3) of the mouse anti-CD100 antibody.



Immunofluorescence staining of rabbit spleen.

Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes**Application**

Western blot

Routinely Tested

BD Biosciences

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Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Hall KT, Boumsell L, Schultze JL, et al. Human CD100, a novel leukocyte semaphorin that promotes B-cell aggregation and differentiation. *Proc Natl Acad Sci U S A*. 1996; 93(21):11780-11785. (Biology)