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CD100

Purified Mouse Monoclonal Antibody
Catalog # AO2645a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q92854
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5H6E3
Isotype	Mouse IgG1
Calculated MW	96150
Immunogen	Purified recombinant fragment of human CD100 (AA: extra 590-734) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	10507
Other Names	SEMA4D; SEMAJ; coll-4; C9orf164; M-sema-G
Dilution	WB~~ 1/500 - 1/2000 IHC~~ 1/200 - 1/1000 ICC~~N/A E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD100 is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SEMA4D
Synonyms	C9orf164, CD100, SEMAJ
Function	Cell surface receptor for PLXNB1 and PLXNB2 that plays an important role in cell-cell signaling (PubMed:20877282). Regulates GABAergic synapse development (By similarity). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner (By similarity). Modulates the complexity and arborization of developing neurites in hippocampal neurons by activating PLXNB1 and interaction with PLXNB1 mediates activation of RHOA (PubMed:19788569). Promotes the migration of cerebellar granule cells

(PubMed:16055703). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro) (PubMed:8876214). Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the phosphatidylinositol 3-kinase-AKT pathway (PubMed:16055703).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Strongly expressed in skeletal muscle, peripheral blood lymphocytes, spleen, and thymus and also expressed at lower levels in testes, brain, kidney, small intestine, prostate, heart, placenta, lung and pancreas, but not in colon and liver

References

1.PLoS One. 2016 Feb 24;11(2):e0150151.2.Microvasc Res. 2014 May;93:1-8.

Images

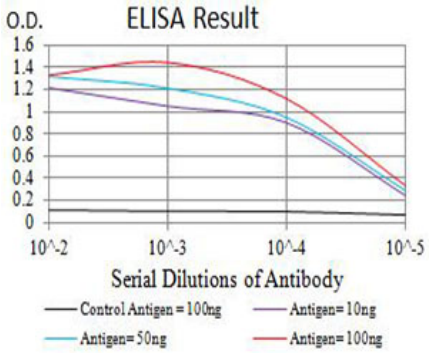


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

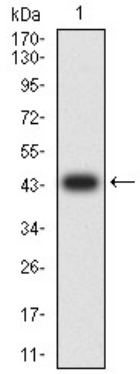


Figure 2:Western blot analysis using CD100 mAb against human CD100 (AA: extra 590-734) recombinant protein. (Expected MW is 43.2 kDa)

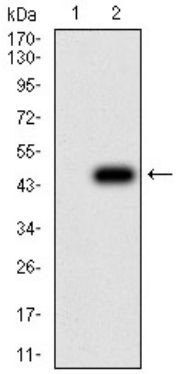


Figure 3:Western blot analysis using CD100 mAb against HEK293 (1) and CD100 (AA: extra 590-734)-hIgGFc transfected HEK293 (2) cell lysate.

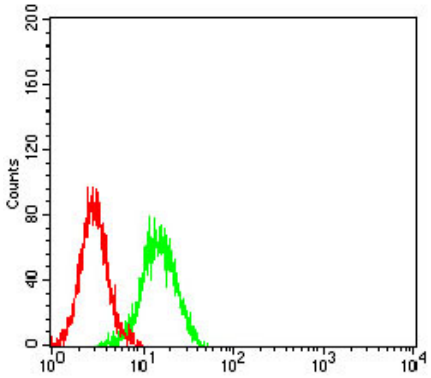


Figure 4:Flow cytometric analysis of K562 cells using CD100 mouse mAb (green) and negative control (red).

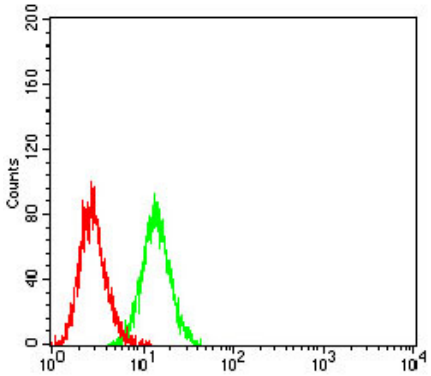


Figure 5:Flow cytometric analysis of Ramos cells using CD100 mouse mAb (green) and negative control (red).

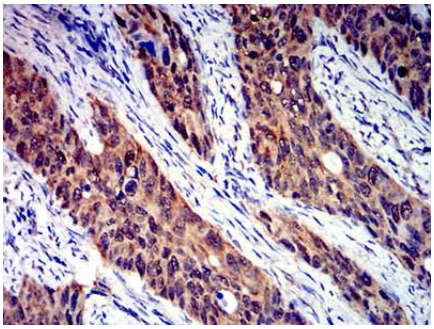


Figure 6:Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using CD100 mouse mAb with DAB staining.

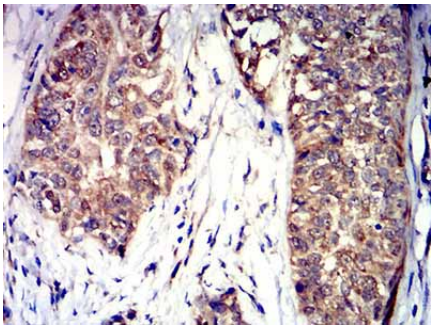


Figure 7:Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using CD100 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.