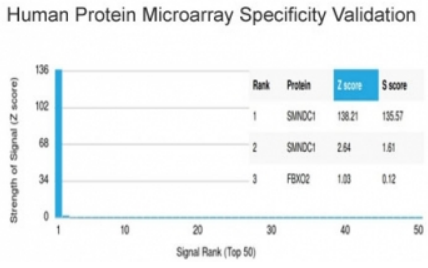
SMNDC1 Antibody [clone PCRP-SMNDC1-1A9] (V9222)

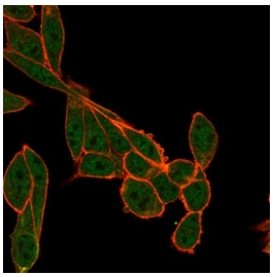
Catalog No.	Formulation	Size
V9222-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9222-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9222SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

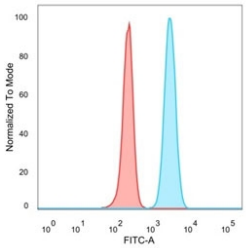
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	PCRP-SMNDC1-1A9
Purity	Protein A/G affinity
UniProt	O75940
Localization	Nucleus
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This SMNDC1 antibody is available for research use only.



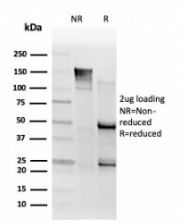
Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using SMNDC1 antibody (clone PCRP-SMNDC1-1A9). These results demonstrate the foremost specificity of the PCRP-SMNDC1-1A9 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



Immunofluorescent staining of PFA-fixed human HeLa cells using SMNDC1 antibody (green, clone PCRP-SMNDC1-1A9) and phalloidin (red).



FACS staining of PFA-fixed human HeLa cells with SMNDC1 antibody (blue, clone PCRP-SMNDC1-1A9), and unstained cells (red).



SDS-PAGE analysis of purified, BSA-free SMNDC1 antibody (clone PCRP-SMNDC1-1A9) as confirmation of integrity and purity.

Description

SPF30 (survival of motor neuron-related-splicing factor 30), also known as SMNDC1 (survival motor neuron domain containing 1) or SMNR (SMN-related protein), is an essential splicing factor required for spliceosome assembly that belongs to the SMN family. It contains one Tudor domain with significant similarity to SMN (survival motor neuron) and is expressed in skeletal muscle, pancreas and heart, localizing to Cajal bodies and nuclear speckles. SPF30 plays an important role in spliceosome assembly and directly interacts with five U snRNPs. The loss of SPF30 causes spliceosome assembly to arrest at prespliceosomes (A complex). This supports a function for SPF30 in mediating the incorporation/recruitment of U4/U5/U6 tri-snRNP to the prespliceosome. In addition, the overexpression of SPF30 can lead to apoptosis.

Application Notes

Optimal dilution of the SMNDC1 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human SMNDC1 protein was used as the immunogen for the SMNDC1 antibody.

Storage

Aliquot the SMNDC1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.