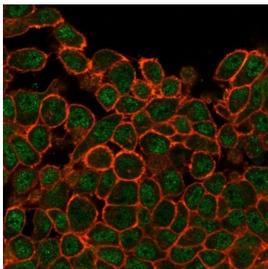


SATB1 Antibody / Special AT-rich sequence-binding protein 1 [clone PCRPSATB1-2C3] (V4981)

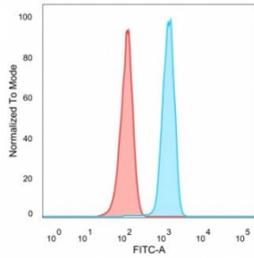
Catalog No.	Formulation	Size
V4981-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4981-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4981SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

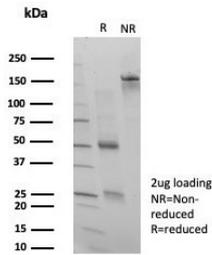
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	PCRPSATB1-2C3
Purity	Protein A/G affinity
UniProt	Q01826
Localization	Nucleus
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This SATB1 antibody is available for research use only.



Immunofluorescent staining of PFA-fixed human HeLa cells with SATB1 antibody (green, clone PCRPSATB1-2C3) and phalloidin (red).



Flow cytometry testing of PFA-fixed human HeLa cells with SATB1 antibody (clone PCR-P-SATB1-2C3) followed by goat anti-mouse IgG-CF488 (blue), Red = unstained cells.



SDS-PAGE analysis of purified, BSA-free SATB1 antibody (clone PCR-P-SATB1-2C3) as confirmation of integrity and purity.

Description

The homeoproteins CCAAT displacement protein (CDP) and special AT-rich sequence binding protein 1 (SATB1) are transcriptional repressors of many cellular genes, and they participate in cell development and cell type differentiation. SATB1 is expressed primarily in thymocytes, and, like CDP, it also contains a distinct homeobox DNA-binding domain that is essential for DNA binding. SATB1 and CDP interact through these homeodomains and synergistically function as mediators of gene expression. SATB1 contains an additional domain that has a higher affinity for DNA and specifically facilitates the direct association between SATB1 and the nuclear matrix attachment regions (MARs) of DNA. MARs are specific DNA sequences that bind to the nuclear matrix and form the base of chromosomal loops that organize the chromosomes and regulate DNA transcription and replication within the nucleus. The association of SATB1 with the core unwinding element within the base-unpairing region of MARs requires both the MAR and homeobox binding domains of SATB1.

Application Notes

Optimal dilution of the SATB1 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human SATB1 protein was used as the immunogen for the SATB1 antibody.

Storage

Aliquot the SATB1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.