Datasheet for ABIN745613

# anti-SATB1 antibody (pSer47)

1 Image | 1 Publication

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## Overview

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|---|---|
| Quantity: | 100 µL |
| Target: | SATB1 |
| Binding Specificity: | pSer47 |
| Reactivity: | Human, Mouse |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This SATB1 antibody is un-conjugated |
| Application: | ELISA, Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)) |

## Product Details

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| Immunogen: | KLH conjugated synthetic phosphopeptide derived from human SATB1 around the phosphorylation site of Ser47 |
| Isotype: | IgG |
| Cross-Reactivity: | Human, Mouse |
| Predicted Reactivity: | Dog,Cow,Pig,Chicken,Rabbit |
| Purification: | Purified by Protein A. |

## Target Details

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|---|---|
| Target: | SATB1 |

## Target Details

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| Alternative Name: | SATB1 (SATB1 Products) |
| Background: | Synonyms: DNA-binding protein SATB1, Special AT-rich sequence-binding protein 1, SATB1<br>Background: Crucial silencing factor contributing to the initiation of X inactivation mediated by Xist RNA that occurs during embryogenesis and in lymphoma (By similarity). Binds to DNA at special AT-rich sequences, the consensus SATB1-binding sequence (CSBS), at nuclear matrix- or scaffold-associated regions. Thought to recognize the sugar-phosphate structure of double-stranded DNA. Transcriptional repressor controlling nuclear and viral gene expression in a phosphorylated and acetylated status-dependent manner, by binding to matrix attachment regions (MARs) of DNA and inducing a local chromatin-loop remodeling. Acts as a docking site for several chromatin remodeling enzymes (e.g. PML at the MHC-I locus) and also by recruiting corepressors (HDACs) or coactivators (HATs) directly to promoters and enhancers. Modulates genes that are essential in the maturation of the immune T-cell CD8SP from thymocytes. Required for the switching of fetal globin species, and beta- and gamma-globin genes regulation during erythroid differentiation. Plays a role in chromatin organization and nuclear architecture during apoptosis. Interacts with the unique region (UR) of cytomegalovirus (CMV). Alu-like motifs and SATB1-binding sites provide a unique chromatin context which seems preferentially targeted by the HIV-1 integration machinery. Moreover, HIV-1 Tat may overcome SATB1-mediated repression of IL2 and IL2RA (interleukin) in T-cells by binding to the same domain than HDAC1. Delineates specific epigenetic modifications at target gene loci, directly up-regulating metastasis-associated genes while down-regulating tumor-suppressor genes. Reprograms chromatin organization and the transcription profiles of breast tumors to promote growth and metastasis. |
| Gene ID: | 6304 |
| UniProt: | Q01826 |
| Pathways: | Caspase Cascade in Apoptosis, Activated T Cell Proliferation |

## Application Details

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| Application Notes: | ELISA 1:500-1000<br>FCM 1:20-100<br>IHC-P 1:200-400<br>IHC-F 1:100-500<br>IF(IHC-P) 1:50-200<br>IF(IHC-F) 1:50-200<br>IF(ICC) 1:50-200 |

## Application Details

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| Restrictions: | For Research Use only |

## Handling

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|---|---|
| Format: | Liquid |
| Concentration: | 1 µg/µL |
| Buffer: | 0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol. |
| Preservative: | ProClin |
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only. |
| Storage: | 4 °C,-20 °C |
| Storage Comment: | Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles. |
| Expiry Date: | 12 months |

## Publications

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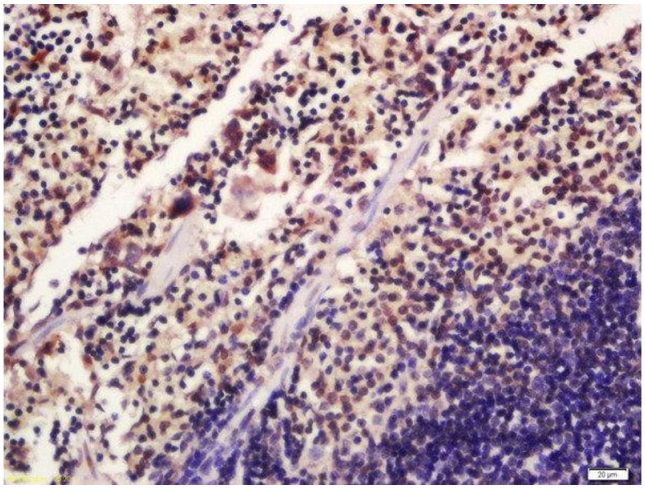
|---|---|
| Product cited in: | Han, Xia, Qin, Han, Wu: "Phosphorylated SATB1 is associated with the progression and prognosis of glioma." in: **Cell death & disease**, Vol. 4, pp. e901, (2013) (PubMed). |

## Images



**Immunohistochemistry (Paraffin-embedded Sections)**

**Image 1.** Formalin-fixed and paraffin embedded mouse spleen labeled with Rabbit Anti-SATB1 (Ser47) Polyclonal Antibody, Unconjugated 1:200 followed by conjugation to the secondary antibody and DAB staining