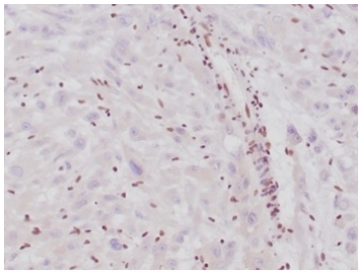
Integrase Interactor 1 Antibody SMARCB1/4587R / SMARCB1 Recombinant Antibody [clone SMARCB1/4587R] (V9475)

Catalog No.	Formulation	Size
V9475-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9475-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9475SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

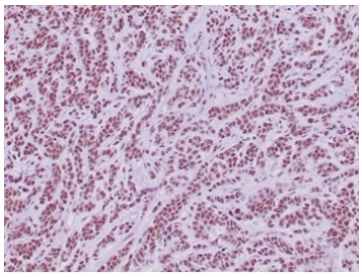
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	SMARCB1/4587R
Purity	Protein A/G affinity
UniProt	Q12824
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Integrase Interactor 1 Antibody SMARCB1/4587R / SMARCB1 Recombinant Antibody is available for research use only.



Integrase Interactor 1 Antibody SMARCB1/4587R by IHC in Epithelioid Sarcoma
Immunohistochemistry of FFPE human epithelioid sarcoma sections using Integrase Interactor 1 Antibody clone SMARCB1/4587R. Distinct nuclear staining is observed in a subset of cells, with relatively limited cytoplasmic signal. This SMARCB1 Recombinant Antibody demonstrates the expected nuclear localization of INI1/BAF47. Sections underwent heat-induced epitope retrieval in pH 9 Tris-EDTA buffer before staining.



Integrase Interactor 1 Antibody SMARCB1/4587R by IHC in Sarcoma
Immunohistochemistry of FFPE human sarcoma sections using Integrase Interactor 1 Antibody clone SMARCB1/4587R. Strong, widespread nuclear labeling is visible throughout the tissue, with well-defined nuclear localization and comparatively limited cytoplasmic staining. The staining pattern produced by this SMARCB1 Recombinant Antibody is consistent with the nuclear localization of INI1/BAF47. Sections underwent heat-induced epitope retrieval in pH 9 Tris-EDTA buffer before staining.

Description

Integrase Interactor 1 Antibody SMARCB1/4587R recognizes a nuclear protein encoded by the SMARCB1 gene and widely known as INI1, BAF47, SNF5 and hSNF5. SMARCB1 is a core subunit of the SWI/SNF family of ATP-dependent chromatin-remodeling complexes. These complexes alter nucleosome organization and chromatin accessibility, helping control transcription, cellular differentiation, proliferation and developmental programs.

SMARCB1 is an important tumor suppressor whose loss can profoundly alter normal chromatin regulation. Biallelic inactivation of the SMARCB1 gene is a characteristic molecular alteration in malignant rhabdoid tumors and is also found in several other neoplasms. Disruption of SMARCB1 function can modify SWI/SNF-dependent transcriptional programs involved in differentiation and cell-cycle regulation, linking altered chromatin remodeling to tumor development.

The name INI1 derives from the original identification of the protein as an interactor of HIV-1 integrase, giving rise to the widely used name integrase interactor 1. BAF47 reflects its association with the mammalian BAF chromatin-remodeling complex, while SNF5 and hSNF5 refer to its relationship with the yeast SNF5 protein. These alternative names remain common throughout research and pathology literature, although SMARCB1 is the official gene symbol.

Loss of SMARCB1/INI1 expression is particularly associated with malignant rhabdoid tumor and epithelioid sarcoma, as well as a growing group of other SMARCB1-deficient neoplasms. Investigation of these tumors has helped reveal the importance of SWI/SNF complex integrity in maintaining normal transcriptional and differentiation programs. SMARCB1 is consequently studied in cancer biology, molecular pathology, epigenetic regulation and mechanisms of tumor suppression.

Beyond its role in cancer, SMARCB1 provides a useful model for understanding how individual SWI/SNF components contribute to chromatin organization and transcriptional control. Alteration of a core complex member can affect numerous downstream genes and cellular pathways, making SMARCB1 relevant to studies of development, lineage specification and cell proliferation. NSJ Bioreagents offers this SMARCB1 Recombinant Antibody for research into these processes. An Integrase Interactor 1 Antibody can be used to investigate SMARCB1/INI1 expression and the biological consequences of altered SWI/SNF chromatin-remodeling activity.

For an antibody with protein microarray specificity validation, see our INI1 Antibody SMARCB1/3984.

Application Notes

Optimal dilution of the Integrase Interactor 1 Antibody SMARCB1/4587R / SMARCB1 Recombinant Antibody should be determined by the researcher.

Immunogen

Human full-length INI1 protein was used as the immunogen for the Integrase Interactor 1 Antibody SMARCB1/4587R.

Storage

Aliquot the Integrase Interactor 1 Antibody SMARCB1/4587R and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

INI1 antibody, SMARCB1 antibody, BAF47 antibody, SNF5 antibody, hSNF5 antibody, INI-1 antibody

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