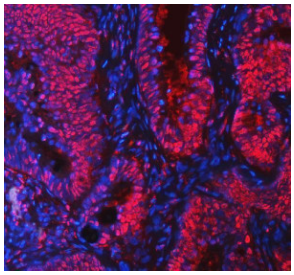
SAFB Antibody / Scaffold attachment factor B1 (R32563)

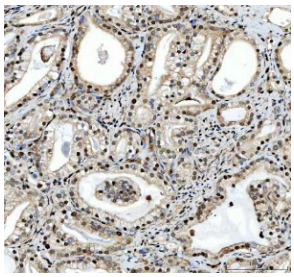
Catalog No.	Formulation	Size
R32563	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

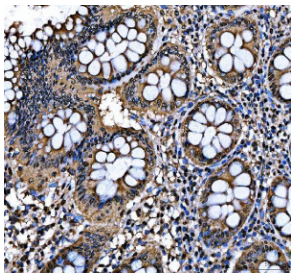
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q15424
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml
Limitations	This SAFB Antibody / Scaffold attachment factor B1 is available for research use only.



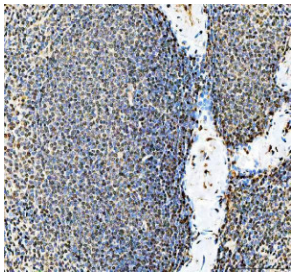
SAFB Antibody Human Colon Cancer IF. Immunofluorescence staining of FFPE human colon cancer tissue with SAFB Antibody demonstrated strong nuclear localization in malignant epithelial cells (red), while nuclei were counterstained with DAPI (blue). Heat-induced epitope retrieval was performed in pH8 EDTA buffer before incubation with the primary antibody and a Fluoro550-conjugated secondary antibody. The staining pattern is consistent with the function of SAFB as a Scaffold Attachment Factor involved in chromatin organization, transcriptional regulation and RNA processing. This SAFB Antibody, a Scaffold Attachment Factor Antibody, is suitable for immunofluorescence studies of nuclear protein expression in cancer and gene regulation research.



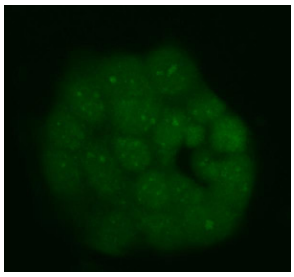
SAFB Antibody Human Prostate Cancer IHC. Immunohistochemical staining of FFPE human prostate cancer tissue demonstrated moderate to strong SAFB expression with predominant nuclear staining in malignant glandular epithelial cells and weaker staining of the surrounding stroma. Heat-induced epitope retrieval was performed in pH8 EDTA buffer before staining with the primary antibody and HRP-DAB detection. The nuclear localization is consistent with the role of Scaffold Attachment Factor in chromatin organization, transcriptional regulation and RNA processing. This SAFB Antibody, a Scaffold Attachment Factor Antibody, is suitable for immunohistochemical studies of nuclear protein expression in prostate cancer and gene regulation research.



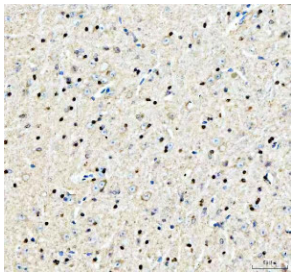
SAFB Antibody Human Colon Cancer IHC. Immunohistochemical staining of FFPE human colon cancer tissue demonstrated moderate to strong SAFB expression with predominantly nuclear staining in neoplastic epithelial cells and weaker staining in the surrounding stroma. Heat-induced epitope retrieval was performed in pH8 EDTA buffer before staining with the primary antibody and HRP-DAB detection. The nuclear localization is consistent with the established role of SAFB as a Scaffold Attachment Factor involved in chromatin organization, transcriptional regulation and RNA processing. This SAFB Antibody, a Scaffold Attachment Factor Antibody, is suitable for immunohistochemical studies of nuclear protein expression in cancer and gene regulation research.



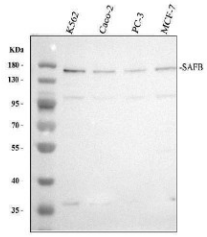
SAFB Antibody Human Tonsil IHC. Immunohistochemical staining of FFPE human tonsil demonstrated widespread SAFB expression with predominant nuclear staining throughout the lymphoid follicles and interfollicular regions. Heat-induced epitope retrieval was performed in pH8 EDTA buffer before staining with the primary antibody and HRP-DAB detection. The nuclear staining pattern is consistent with the role of Scaffold Attachment Factor in chromatin organization, transcriptional regulation and RNA processing within proliferating immune cells. This SAFB Antibody, a Scaffold Attachment Factor Antibody, is suitable for immunohistochemical studies of nuclear protein expression in lymphoid tissues and immune cell biology.



SAFB Antibody T47D Cell IF. Immunofluorescence staining of T47D cells with SAFB Antibody demonstrated predominant nuclear localization with a punctate staining pattern characteristic of nuclear speckles involved in RNA processing and transcriptional regulation. Cells underwent enzyme-mediated antigen retrieval before incubation with the primary antibody and a Fluoro488-conjugated secondary antibody. The observed staining is consistent with the function of SAFB as a Scaffold Attachment Factor that associates with chromatin and nuclear RNA-processing complexes. This SAFB Antibody, a Scaffold Attachment Factor Antibody, is suitable for immunofluorescence studies of nuclear organization, gene regulation and RNA metabolism.



SAFB Antibody Mouse Brain IHC. Immunohistochemical staining of FFPE mouse brain demonstrated widespread SAFB expression with prominent nuclear staining in neurons and other brain cells, accompanied by weaker diffuse cytoplasmic staining. Heat-induced epitope retrieval was performed in pH8 EDTA buffer before staining with the primary antibody and HRP-DAB detection. The predominantly nuclear localization is consistent with the role of Scaffold Attachment Factor in chromatin organization, transcriptional regulation and RNA processing within the central nervous system. This SAFB Antibody, a Scaffold Attachment Factor Antibody, is suitable for immunohistochemical studies of neuronal gene regulation and brain tissue biology.



SAFB Antibody Human Cancer Cell WB. Western blot analysis detected SAFB in human K562 (lane 1), Caco-2 (lane 2), PC-3 (lane 3) and MCF-7 (lane 4) cell lysates. A predominant immunoreactive band was observed at approximately 150 kDa, migrating higher than the predicted molecular weight of about 103 kDa, consistent with the reduced electrophoretic mobility reported for this multifunctional nuclear protein. SAFB is known to undergo extensive post-translational modification and participate in large nuclear protein complexes, which can influence its apparent migration. This SAFB Antibody, a Scaffold Attachment Factor Antibody, is suitable for detecting endogenous SAFB in studies of transcriptional regulation, chromatin organization and RNA processing.

Description

SAFB Antibody / Scaffold Attachment Factor Antibody recognizes Scaffold Attachment Factor B (SAFB), a multifunctional nuclear protein that integrates chromatin organization, transcriptional regulation and RNA metabolism. SAFB binds scaffold or matrix attachment regions of DNA while also interacting with numerous transcription factors, RNA-binding proteins and components of the spliceosome. Through these diverse molecular interactions, SAFB helps coordinate gene expression by linking chromatin architecture with transcription and post-transcriptional RNA processing. NSJ Bioreagents provides SAFB antibodies for studies of nuclear organization, epigenetics and RNA biology.

SAFB is expressed in a wide variety of tissues and is localized predominantly within the nucleus, where it functions as both a transcriptional coregulator and an RNA-binding protein. The protein associates with chromatin remodeling complexes, hormone receptors and transcription factors to influence gene activation or repression in a context-dependent manner. SAFB also contributes to alternative RNA splicing, RNA stability and the cellular response to stress, allowing coordinated regulation of gene expression at multiple levels. These activities make SAFB an important regulator of nuclear structure and genome function.

Altered SAFB expression or activity has been associated with breast cancer, prostate cancer, neurological disorders and other diseases involving disrupted transcriptional control or RNA processing. SAFB has been extensively studied for its interactions with estrogen receptor signaling pathways and its role in hormone-responsive cancers, while more recent work has highlighted its participation in DNA damage responses, stress granule formation and epigenetic regulation. As a result, SAFB has become an important research target in cancer biology, endocrinology and molecular genetics.

An SAFB Antibody is a valuable reagent for detecting this multifunctional nuclear protein by Western blotting, immunohistochemistry, immunofluorescence, immunoprecipitation and related immunoassays. By enabling reliable analysis of protein expression and subcellular localization, an SAFB Antibody supports investigations of chromatin organization, transcriptional regulation, RNA processing and nuclear signaling.

Researchers investigating nuclear gene regulation and chromatin architecture may also be interested in our Nuclear Marker Antibodies page, featuring antibodies against proteins involved in transcription, RNA processing and nuclear organization.

Application Notes

Differences in protocols and secondary/substrate sensitivity may require the SAFB Antibody / Scaffold attachment factor B1 to be titrated for optimal performance.

Immunogen

Amino acids 715-754 (DLDRRDDAYWPEAKRAALDERYHSDFNRQDRFHDFDHRDR) from the human protein were used as the immunogen for the SAFB antibody.

Storage

After reconstitution, the SAFB antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

SAFB antibody, Scaffold Attachment Factor B antibody, Scaffold Attachment Factor antibody, HET antibody

References (1)

Copyright © NSJ Bioreagents. All rights reserved.