For Research Use Only

SAFB Polyclonal antibody

Catalog Number: 21857-1-AP

3 Publications



Basic Information

Catalog Number:

21857-1-AP

Size:

450 µg/ml

Source:

Rabbit

GenBank Accession Number:

BC126219

GeneID (NCBI):

6294

UNIPROT ID:

Rabtit

Q15424

Isotype:

Full Name:

scaffold attachment factor B

Immunogen Catalog Number:Calculated MW:AG16451917 aa, 103 kDaObserved MW:

150 kDa

Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:5000-1:50000 IHC 1:50-1:500

IF 1:20-1:200

Applications

Tested Applications: IF/ICC, IHC, WB, ELISA Cited Applications: IF

Species Specificity: human, mouse Cited Species: human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HepG2 cells, HEK-293 cells, HeLa cells, MCF-7 cells, A431 cells, HCT 116 cells, COLO 320 cells

IHC : mouse testis tissue, human testis tissue, human breast cancer tissue

IF: A431 cells,

Background Information

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to pre-mRNA processing and transport. hnRNPs also bind heterogeneous nuclear RNA (hnRNA), the transcripts produced by RNA polymerase II. SAFB (scaffold attachment factor B) is a nuclear matrix-associated protein that binds to matrix- or scaffold-associating regions (MARs or SARs) on DNA and interacts with RNA polymerase II and serine-/arginine-rich RNA processing factors (SR proteins). SAFB, also designated HAP (hnRNP A1 associated protein) and HET (HSP 27-ERE-TATA-binding protein) is a proven hnRNP protein that has a speckled distribution in the nucleus and, in response to stress agents such as heat shock, is recruited to a few, large nuclear granules, called perichromatin granules. SAFB also binds to the estrogen receptor (ER) and is expressed in several breast cancer cell lines at varying levels. Subsequently, SAFB may play a role in breast cancer by mediating cellular proliferation and division. This antibody specifically reacts whith the isoform 1 of human SAFB protein. SF3A1, also known as SF3a120, is a 793 amino acid protein, which is a Subunit of the splicing factor SF3A required for 'A' complex assembly formed by the stable binding of U2 snRNP to the branchpoint sequence (BPS) in pre-mRNA. SF3A1 also be involved in the assembly of the 'E' complex. The calculated molecular weight of SAFB is 103 kDa, but the modified SAFB is about 130-175 kDa. (PMID: 28469965, PMID: 26273616)

Notable Publications

Author	Pubmed ID	Journal	Application
Mahlon Collins	32586379	Acta Neuropathol Commun	IF
Haiyan An	34915152	Neurobiol Dis	IF
Yaqiang Hong	38604171	Mol Cell	IF

Storage

Storage

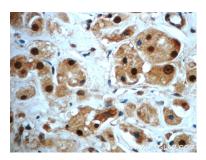
Store at -20°C. Stable for one year after shipment.

Storage Buffer

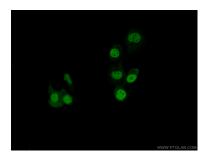
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



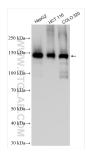
Immunohistochemical analysis of paraffinembedded human breast cancer slide using 21857-1-AP (SAFB Antibody) at dilution of 1:50.



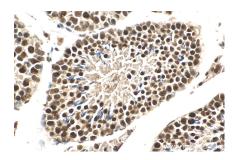
Immunofluorescent analysis of A431 cells using 21857-1-AP (SAFB antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).



MCF-7 cells were subjected to SDS PAGE followed by western blot with 21857-1-AP (SAFB Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 21857-1-AP (SAFB antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using 21857-1-AP (SAFB antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).