

Anti-SAFB Picoband Antibody

Catalog # ABO11713

Product Information

Application	WB
Primary Accession	Q15424
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Scaffold attachment factor B1(SAFB) detection. Tested with WB in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	6294
Other Names	Scaffold attachment factor B1, SAF-B, SAF-B1, HSP27 estrogen response element-TATA box-binding protein, HSP27 ERE-TATA-binding protein, SAFB, HAP, HET, SAFB1
Calculated MW	102642
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Nucleus .
Tissue Specificity	Ubiquitous. Expressed at high levels in the CNS and at low levels in the liver. Expressed in a wide number of breast cancer cell lines.
Source	Eukaryota
Protein Name	Scaffold attachment factor B1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SAFB (715-754aa DLDRDDAYWPEAKRAALDERYHSDFNQRQDRFHDHFDHRDR), different from the related mouse and rat sequences by five amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also

be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	SAFB
Synonyms	HAP, HET, SAFB1
Function	Binds to scaffold/matrix attachment region (S/MAR) DNA and forms a molecular assembly point to allow the formation of a 'transcriptosomal' complex (consisting of SR proteins and RNA polymerase II) coupling transcription and RNA processing (PubMed: 9671816). Functions as an estrogen receptor corepressor and can also bind to the HSP27 promoter and decrease its transcription (PubMed: 12660241). Thereby acts as a negative regulator of cell proliferation (PubMed: 12660241). When associated with RBMX, binds to and stimulates transcription from the SREBF1 promoter (By similarity).
Cellular Location	Nucleus
Tissue Location	Ubiquitous. Expressed at high levels in the CNS and at low levels in the liver. Expressed in a wide number of breast cancer cell lines

Background

Scaffold attachment factor B, also known as SAFB, is a gene with homologs that have been studied in humans and mice. This gene encodes a DNA-binding protein which has high specificity for scaffold or matrix attachment region DNA elements (S/MAR DNA). This protein is thought to be involved in attaching the base of chromatin loops to the nuclear matrix but there is conflicting evidence as to whether this protein is a component of chromatin or a nuclear matrix protein. Scaffold attachment factors are a specific subset of nuclear matrix proteins (NMP) that specifically bind to S/MAR. The encoded protein is thought to serve as a molecular base to assemble a 'transcriptosome complex' in the vicinity of actively transcribed genes. It is involved in the regulation of heat shock protein 27 transcription, can act as an estrogen receptor co-repressor and is a candidate for breast tumorigenesis. This gene is arranged head-to-head with a similar gene whose product has the same functions. Multiple transcript variants encoding different isoforms have been found for this gene.

Images



Western blot analysis of SAFB expression in HELA whole cell lysates (lane 1) and MCF-7 whole cell lysates (lane 2). SAFB at 150KD was detected using rabbit anti- SAFB Antigen Affinity purified polyclonal antibody (Catalog # ABO11713) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .