



YB-1 Rabbit mAb

Catalog No	YP-rAb-17384
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	YBX1
Protein Name	Nuclease-sensitive element-binding protein 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	YBX1 ; NSEP1 ; YB1 ; Nuclease-sensitive element-binding protein 1 ; CCAAT-binding transcription factor I subunit A ; CBF-A ; DNA-binding protein B ; DBPB ; Enhancer factor I subunit A ; EFI-A ; Y-box transcription factor ; Y-box-binding protein 1 ; YB-
Observed Band	49kD
Calculated Molecular Weight	36kD
Cell Pathway	Cytoplasm . Nucleus . Cytoplasmic granule . Secreted . Secreted, extracellular exosome . Predominantly cytoplasmic in proliferating cells (PubMed:12604611). Cytotoxic stress and DNA damage enhance translocation to the nucleus (PubMed:14718551). Localized in cytoplasmic mRNP granules containing untranslated mRNAs (PubMed:25229427). Shuttles between nucleus and cytoplasm (PubMed:25229427). Localized with DDX1, MBNL1 and TIAL1 in stress granules upon stress (PubMed:18335541). Secreted by mesangial and monocytic cells after inflammatory challenges (PubMed:19483673). .
Tissue Specificity	Adrenal cortex,Bone marrow,Brain,Epithelium,Eye,Kidney,Lung,Muscle,Placenta,Skin,Te
Function	Binds to splice sites in pre-mRNA and regulates splice site selection. Binds and stabilizes cytoplasmic mRNA. Contributes to the regulation of translation by modulating the interaction between the mRNA and eukaryotic initiation factors (By





similarity). Binds to promoters that contain a Y-box (5'-CTGATTGGCCAA-3'), such as HLA class II genes. Regulates the transcription of numerous genes. Promotes separation of DNA strands that contain mismatches or are modified by cisplatin. Has endonucleolytic activity and can introduce nicks or breaks into double-stranded DNA (in vitro). May play a role in DNA repair. PTM: Cleaved by a 20S proteasomal protease in response to agents that damage DNA. Cleavage takes place in the absence of ubiquitination and ATP. The resulting N-terminal fragment accumulates in the nucleus. PTM: In the absence of phosphorylation the protein is retained in the cytoplasm. similarity: Contains 1 CSD (cold-shock) domain. subcellular location: Shuttles between nucleus and cytoplasm. Predominantly cytoplasmic in proliferating cells. Cytotoxic stress and DNA damage enhance translocation to the nucleus. subunit: Component of cytoplasmic messenger ribonucleoprotein particles (mRNPs). Interacts with AKT1, SFRS9, THOC4, MSH2, XRCC5, WRN and NCL. Can bind to DNA as a homomeric form, (EF1-A)_n or as a heteromeric form in association with EF1-B. Homodimer in the presence of ATP.

Background

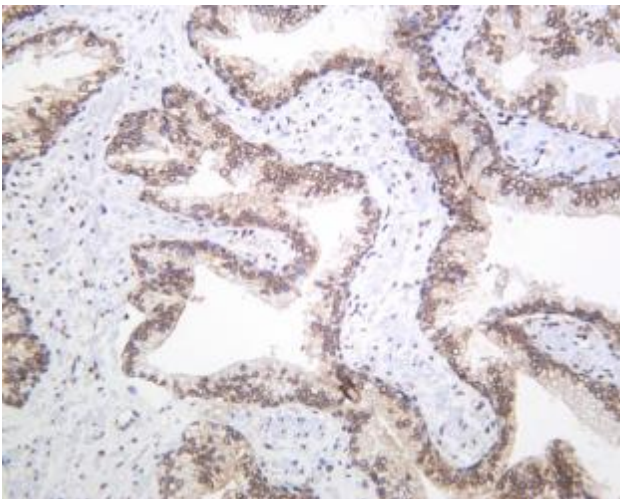
This gene encodes a highly conserved cold shock domain protein that has broad nucleic acid binding properties. The encoded protein functions as both a DNA and RNA binding protein and has been implicated in numerous cellular processes including regulation of transcription and translation, pre-mRNA splicing, DNA repair and mRNA packaging. This protein is also a component of messenger ribonucleoprotein (mRNP) complexes and may have a role in microRNA processing. This protein can be secreted through non-classical pathways and functions as an extracellular mitogen. Aberrant expression of the gene is associated with cancer proliferation in numerous tissues. This gene may be a prognostic marker for poor outcome and drug resistance in certain cancers. Alternate splicing results in multiple transcript variants. Pseudogenes of this gene are found on multiple chromosomes. [provided by RefSeq, Sep 2015]

matters needing attention

Avoid repeated freezing and thawing!

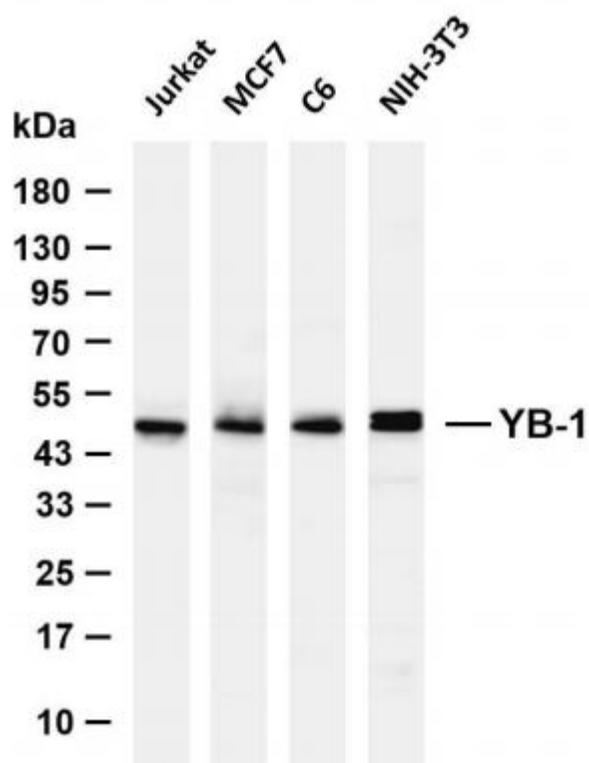
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Human prostate carcinoma was stained with anti-YB-1 Rabbit antibody





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-YB-1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Jurkat Lane 2: MCF7 Lane 3: C6 Lane 4: NIH-3T3. Predicted band size: 36kDa Observed band size: 49kDa

