



YB-1 Monoclonal Antibody

Catalog No	YP-mAb-02159
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	YBX1
Immunogen	The antiserum was produced against synthesized peptide derived from human YBX1. AA range:68-117
Specificity	YB-1 Monoclonal Antibody detects endogenous levels of YB-1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CBF A;CBF-A;CCAAT-binding transcription factor I subunit A;DBPB;DNA-binding protein B;YB-1;YBX1;Nuclease-sensitive element-binding protein 1; NSEP1;YB1;Enhancer factor I subunit A;EFI-A;Y-box transcription factor;Y-box-binding protein 1;YB-
Observed Band	36kD
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

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

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.

Products Images



Western Blot analysis of various cells using YB-1
Monoclonal Antibody

