

# Summary

| Production Name | YB-1 Rabbit Polyclonal Antibody |
|-----------------|---------------------------------|
| Description     | Rabbit Polyclonal Antibody      |
| Host            | Rabbit                          |
| Application     | WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA |
| Reactivity      | Human, Mouse, Rat               |

### Performance

| Conjugation  | Unconjugated   |
|--------------|--|
| Modification | Unmodified   |
| lsotype      | IgG  |
| Clonality    | Polyclonal   |
| Form         | Liquid   |
| Storage      | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw   |
|              | cycles.  |
| Buffer       | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N. |
| Purification | Affinity purification  |

### Immunogen

| Gene Name         | YBX1  |
|-------------------|---|
| Alternative Names | 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-              |
| Gene ID           | 4904.0  |
| SwissProt ID      | P67809.The antiserum was produced against synthesized peptide derived from human        |
|                   | YBX1. AA range:68-117   |

# Application

| Dilution Ratio   | IHC-P 100-300.WB 1:500-1:2000, ELISA 1:40000, IF-P/IF-F/ICC/IF 1:50-200 |
|------------------|---|
| Molecular Weight | 36kDa   |

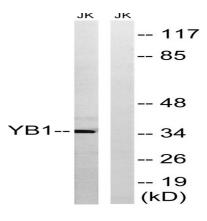


### Background

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 reparation 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], 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, (EFI-A)n or as a heteromeric form in association with EFI-B. Homodimer in the presence of ATP.,

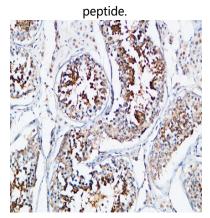
## **Research Area**

#### Image Data

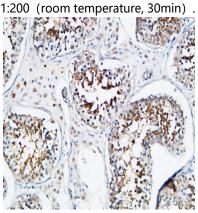




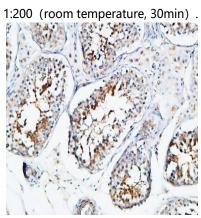
Western blot analysis of lysates from Jurkat cells, using YB1 Antibody. The lane on the right is blocked with the synthesized



Immunohistochemical analysis of paraffin-embedded Human testis. 1, Antibody was diluted at 1:200 (4°,overnight) . 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at



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**Note** For research use only.