

# Immunotag™ YB-1 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4925
Product Description	Immunotag™ YB-1 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	YB-1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	IHC-p: 100-300.Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from YB-1, at AA range: 40-120
Specificity	YB-1 Polyclonal Antibody detects endogenous levels of YB-1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	YBX1
Accession No.	P67809 P62960 P62961
Alternate 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-

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Description	Y-box binding protein 1(YBX1) Homo sapiens 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],
Protein Expression	Adrenal cortex,Bone marrow,Brain,Epithelium,Eye,Kidney,Lung,Muscle,Placenta,Skin,Te
Subcellular Localization	nucleus,nucleoplasm,U12-type spliceosomal complex,cytoplasm,cytoplasmic stress granule,intracellular ribonucleoprotein complex,nuclear membrane,intracellular membrane-bounded organelle,extracellular exosome,CRD-mediated mRNA stability complex,
Protein 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.,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) <sub>n</sub> or as a heteromeric form in association with EFI-B. Homodimer in the presence of ATP.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.