

# Product datasheet

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# ARG55021 anti-YBX1 antibody

Package: 100 μl Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes YBX1

Tested Reactivity Hu

Predict Reactivity Ms, Rat, Bov, Rb

Tested Application ICC/IF, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name YBX1

Species Human

Immunogen KLH-conjugated synthetic peptide corresponding to aa. 149-178 (Center) of Human YBX1.

Conjugation Un-conjugated

Alternate Names Nuclease-sensitive element-binding protein 1; Y-box transcription factor; DBPB; YB1; CSDA2; CCAAT-

binding transcription factor I subunit A; CBF-A; DNA-binding protein B; MDR-NF1; BP-8; Enhancer factor

I subunit A; EFI-A; YB-1; CSDB; NSEP1; Y-box-binding protein 1; NSEP-1

#### **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:10 - 1:50
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	293T	

### **Properties**

Form Liquid

Purification Purification with Protein A and immunogen peptide.

Buffer PBS and 0.09% (W/V) Sodium azide

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GeneID: 4904 Human

Swiss-port # P67809 Human

Gene Symbol YBX1

Gene Full Name Y box binding protein 1

Function Mediates pre-mRNA alternative splicing regulation. 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). Regulates the transcription of numerous genes. Its transcriptional activity on the multidrug resistance gene MDR1 is enhanced in presence of the APEX1 acetylated form at 'Lys-6' and 'Lys-7'. Binds to promoters that contain a Y-box (5'-CTGATTGGCCAA-3'), such as MDR1 and HLA class II 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. Component of the CRD-mediated complex that promotes MYC mRNA stability. Binds

preferentially to the 5'-[CU]CUGCG-3' motif in vitro.

The secreted form acts as an extracellular mitogen and stimulates cell migration and proliferation.

[UniProt]

Research Area Controls and Markers antibody; Developmental Biology antibody; Gene Regulation antibody

Calculated Mw 36 kDa

PTM Ubiquitinated by RBBP6; leading to a decrease of YBX1 transcactivational ability.

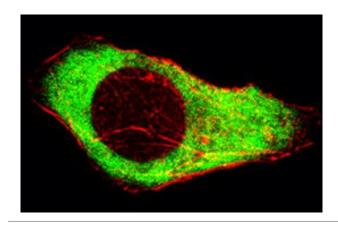
In the absence of phosphorylation the protein is retained in the cytoplasm.

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

(By similarity).

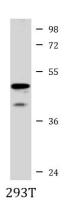
Cellular Localization Cytoplasm, Nucleus, Secreted

#### **Images**



#### ARG55021 anti-YBX1 antibody ICC/IF image

Immunofluorescence: A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then stained with ARG55021 anti-YBX1 antibody (green) at 1:25, 1 hour at 37°C. Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7 units/ml, 1 hour at 37°C).



## ARG55021 anti-YBX1 antibody WB image

Western blot: 35  $\mu g$  of 293T cell lysate stained with ARG55021 anti-YBX1 antibody.