

For Research Use Only

# YBX1 Polyclonal antibody

Catalog Number: 20339-1-AP

Featured Product

74 Publications



## Basic Information

### Catalog Number:

20339-1-AP

### Size:

150ul, Concentration: 800 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG14129

### GenBank Accession Number:

BC010430

### GeneID (NCBI):

4904

### UNIPROT ID:

P67809

### Full Name:

Y box binding protein 1

### Calculated MW:

324 aa, 36 kDa

### Observed MW:

36-56 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:500-1:2000

IF/ICC: 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, ChIP, RIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** HEK-293 cells, HeLa cells, Jurkat cells, MCF-7 cells, MDA-MB-231 cells, NIH/3T3 cells

**IHC:** human renal cell carcinoma tissue, human placenta tissue, human breast cancer tissue, human prostate cancer tissue, human tonsillitis tissue, mouse colon tissue, rat colon tissue, human colon cancer tissue

**IF/ICC:** HeLa cells,

## Background Information

Y box binding protein 1 (YBX1) is one of cis-acting elements which has a role in regulation of the expression of HLA class II genes. YBX1 is great of importance in regulation of PTP1B expression. It can bind to splice sites mediate pre-mRNA alternative splicing regulation. Also, it involves the regulation of translation by modulation of the interaction between the mRNA and eukaryotic initiation factors. Its transcriptional activity on the multidrug resistance gene MDR1 is enhanced in presence of the APEX1 acetylated form at 'Lys-6' and 'Lys-7'. The secreted form acts as an extracellular mitogen and stimulates cell migration and proliferation. The calculated molecular weight of YBX1 is 36 kDa, but modified YBX1 is about 36-56 kDa (PMID: 27384875). Recently, researchers developed a biomimetic nanoplatfrom to deliver RNA piR-RCC specifically into RCC tumors. This RNA interacts with YBX1 to inhibit tumor proliferation and metastasis (PMID: 40411401).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yan Chen	31488005	J Invest Surg	WB, IHC, IF
Haiyan An	31636118	J Cell Biol	WB
Yuecheng Guo	34662704	Biochim Biophys Acta Mol Basis Dis	IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

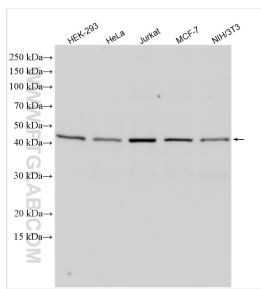
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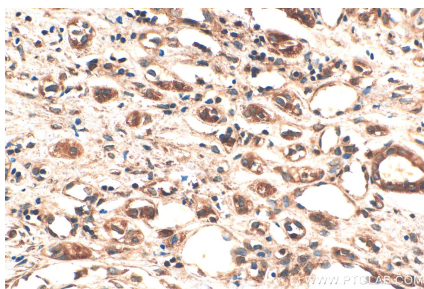
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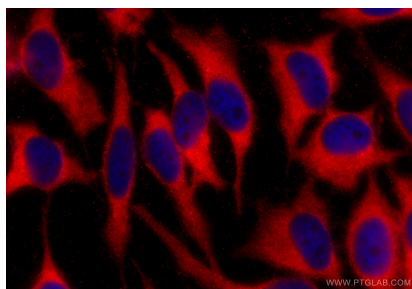
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 20339-1-AP (YBX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 20339-1-AP (YBX1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using YBX1 antibody (20339-1-AP) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).