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YBX1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI10130

Product Information

Application	WB, IHC
Primary Accession	P67809
Other Accession	P67809, NP_004550, NM_004559
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Pig, Chicken, Dog, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35924

Additional Information

Gene ID	4904
Alias Symbol	BP-8, CSDA2, CSDB, DBPB, MDR-NF1, MGC104858, MGC110976, MGC117250, NSEP-1, NSEP1, YB-1, YB1
Other Names	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-1, YBX1, NSEP1, YB1
Target/Specificity	YBX1 binds to splice sites in pre-mRNA and regulates splice site selection. YBX1 binds and stabilizes cytoplasmic mRNA. YBX1 contributes to the regulation of translation by modulating the interaction between the mRNA and eukaryotic initiation factors. YBX1 binds to promoters that contain a Y-box (5'-CTGATTGGCCAA-3'), such as HLA class II genes. YBX1 regulates the transcription of numerous genes. YBX1 promotes separation of DNA strands that contain mismatches or are modified by cisplatin. YBX1 has endonucleolytic activity and can introduce nicks or breaks into double-stranded DNA (in vitro). YBX1 may play a role in DNA repair. YBX1 is the component of the CRD-mediated complex that promotes MYC mRNA stability.
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-YBX1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.
Precautions	YBX1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

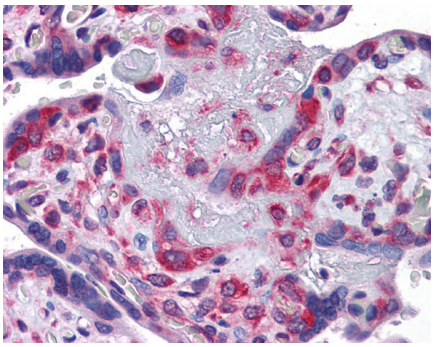
Protein Information

Name	YBX1 (HGNC:8014)
Function	DNA- and RNA-binding protein involved in various processes, such as translational repression, RNA stabilization, mRNA splicing, DNA repair and transcription regulation (PubMed:10817758, PubMed:11698476, PubMed:14718551, PubMed:18809583, PubMed:31358969, PubMed:8188694). Predominantly acts as a RNA-binding protein: binds preferentially to the 5'-[CU]CUGCG-3' RNA motif and specifically recognizes mRNA transcripts modified by C5-methylcytosine (m5C) (PubMed:19561594, PubMed:31358969). Promotes mRNA stabilization: acts by binding to m5C-containing mRNAs and recruiting the mRNA stability maintainer ELAVL1, thereby preventing mRNA decay (PubMed:10817758, PubMed:11698476, PubMed:31358969). Component of the CRD-mediated complex that promotes MYC mRNA stability (PubMed:19029303). Contributes to the regulation of translation by modulating the interaction between the mRNA and eukaryotic initiation factors (By similarity). Plays a key role in RNA composition of extracellular exosomes by defining the sorting of small non-coding RNAs, such as tRNAs, Y RNAs, Vault RNAs and miRNAs (PubMed:27559612, PubMed:29073095). Probably sorts RNAs in exosomes by recognizing and binding C5-methylcytosine (m5C)-containing RNAs (PubMed:28341602, PubMed:29073095). Acts as a key effector of epidermal progenitors by preventing epidermal progenitor senescence: acts by regulating the translation of a senescence-associated subset of cytokine mRNAs, possibly by binding to m5C-containing mRNAs (PubMed:29712925). Also involved in pre-mRNA alternative splicing regulation: binds to splice sites in pre-mRNA and regulates splice site selection (PubMed:12604611). Binds to TSC22D1 transcripts, thereby inhibiting their translation and negatively regulating TGF-beta- mediated transcription of COL1A2 (By similarity). Also able to bind DNA: regulates transcription of the multidrug resistance gene MDR1 is enhanced in presence of the APEX1 acetylated form at 'Lys-6' and 'Lys- 7' (PubMed:18809583). Binds to promoters that contain a Y-box (5'-CTGATTGGCCAA-3'), such as MDR1 and HLA class II genes (PubMed:18809583, PubMed:8188694). Promotes separation of DNA strands that contain mismatches or are modified by cisplatin (PubMed:14718551). Has endonucleolytic activity and can introduce nicks or breaks into double-stranded DNA, suggesting a role in DNA repair (PubMed:14718551). The secreted form acts as an extracellular mitogen and stimulates cell migration and proliferation (PubMed:19483673).
Cellular Location	Cytoplasm. Nucleus. Cytoplasmic granule. Secreted. Secreted, extracellular exosome. Cytoplasm, P-body {ECO:0000250|UniProtKB:P62960}. Note=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)

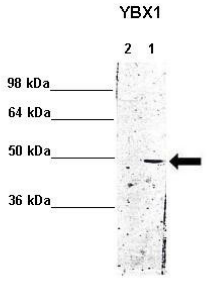
Background

This is a rabbit polyclonal antibody against YBX1. It was validated on Western Blot using a cell lysate as a positive control. Abgent strives to provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire (sales@abgent.com).

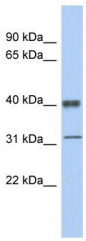
Images



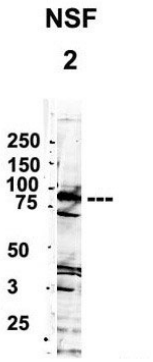
YBX1 antibody - middle region (AI10130) in Human Placenta cells using Immunohistochemistry
Placenta



YBX1 antibody - middle region (AI10130) in mouse brain cells using Western Blot
WB Suggested Anti-YBX1 Antibody
Positive Control: Lane 1: 5ug mouse brain cytoplasm Lane 2: 5ug mouse brain nucleus
Primary Antibody Dilution : 1:1000
Secondary Antibody : Anti rabbit - IR-dye
Secondry Antibody Dilution : 1:10,000
Submitted by: Anonymous



YBX1 antibody - middle region (AI10130) in Human Spleen cells using Western Blot
WB Suggested Anti-YBX1 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:312500
Positive Control: Human Spleen



YBX1 antibody - middle region (AI10130) in Human NT-2 cells using Western Blot
YBX1 antibody - middle region (AI10130) validated by WB using 1. Human NT-2 cells (60ug) at 2 µg/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.