

YB1 (15K16) Rabbit Monoclonal Antibody

YB1 (15K16) Rabbit Monoclonal Antibody Catalog # AP93670

Specification

YB1 (15K16) Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Calculated MW WB, IHC, IF, FC, ICC, IP P67809 Human, Mouse Monoclonal 35924

YB1 (15K16) Rabbit Monoclonal Antibody - Additional Information

Gene ID 4904

Other Names

Y-box-binding protein 1, YB-1, CCAAT-binding transcription factor I subunit A, CBF-A, DNA-binding protein B, Nuclease-sensitive element-binding protein 1, Y-box transcription factor, YBX1 (HGNC:8014)

Storage Conditions -20°C

YB1 (15K16) Rabbit Monoclonal Antibody - 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:11698476, PubMed:11698476, PubMed:13809583, PubMed:31358969, PubMed:31358969, PubMed:31358969, PubMed:18809583, PubMed:18809583, PubMed:18809583, PubMed:18809583, PubMed:1358969, PubMed:1358969, PubMed:1358969, PubMed:1358969, PubMed:11608476, PubMed:11608476, PubMed:11608476, PubMed:10807758, PubMed:10807758, PubMed:<a hr

href="http://www.uniprot.org/citations/11698476" target="_blank">11698476, PubMed:31358969). Component of the CRD-mediated complex that promotes MYC mRNA stability (PubMed:<a



href="http://www.uniprot.org/citations/19029303" target="_blank">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:<a href="http://www.uniprot.org/citations/28341602"

target="_blank">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:<a href="http://www.uniprot.org/citations/12604611"

target="_blank">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:18809583, 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:000250|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)

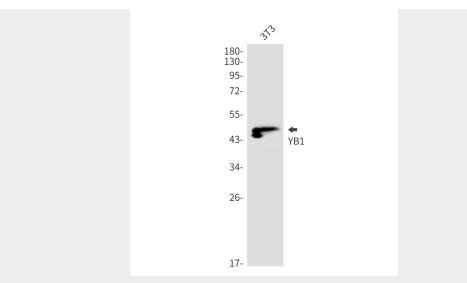
YB1 (15K16) Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

YB1 (15K16) Rabbit Monoclonal Antibody - Images





Western blot detection of YB1 in Hela, C2C12 cell lysates using YB1 antibody(1:1000 diluted).