# abcam

### Product datasheet

## Anti-YB1 (phospho S102) antibody ab138654

1 References 1 Image

Overview		
Product name	Anti-YB1 (phospho S102) antibody	
Description	Rabbit polyclonal to YB1 (phospho S102)	
Host species	Rabbit	
Tested applications	Suitable for: WB	
Species reactivity	Reacts with: Human	
	Predicted to work with: Mouse, Rat	
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
Positive control	Extracts from HepG2 cells treated with PMA.	
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.	
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As	
Properties		

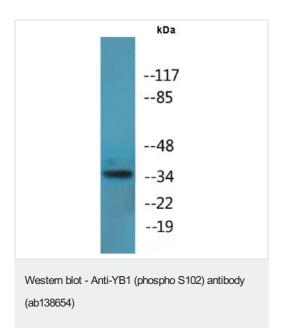
Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.88% Sodium chloride
	PBS is without Mg <sup>2+</sup> and Ca <sup>2+</sup>
Purity	Immunogen affinity purified
Purification notes	ab138654 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope- specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation.
Clonality	Polyclonal

#### Applications

The Abpromise guaranteeOur Abpromise guaranteecovers the use of ab138654 in the following tested applications.The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/1000. Predicted molecular weight: 36 kDa.

Function	<ul> <li>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.</li> <li>The secreted form acts as an extracellular mitogen and stimulates cell migration and proliferation.</li> </ul>
Sequence similarities	Contains 1 CSD (cold-shock) domain.
Post-translational modifications	Ubiquitinated by RBBP6; leading to a decrease of YBX1 transcativational 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.
Cellular localization	Cytoplasm. Nucleus. Cytoplasmic granule. Secreted. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Shuttles between nucleus and cytoplasm. Predominantly cytoplasmic in proliferating cells. Cytotoxic stress and DNA damage enhance translocation to the nucleus. Localized with DDX1, MBNL1 and TIAL1 in stress granules upon stress. Secreted by mesangial and monocytic cells after inflammatory challenges. Translocates from the cytoplasm to the nucleus after and colocalizes with APEX1 in nuclear speckles after genotoxic stress.



Anti-YB1 (phospho S102) antibody (ab138654) at 1/500 dilution + HepG2 cell extract (from cells treated with PMA at 125ng/ml for 15 minutes) at 30  $\mu$ g

#### Predicted band size: 36 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
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- Extensive multi-media technical resources to help you
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