



Mouse Anti-Human YB-1 Monoclonal antibody, clone 21A3 (CABT-L4479)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

The 21A3 monoclonal antibody reacts with human Y-box binding protein 1 (YB-1) a highly conserved protein that has broad nucleic acid binding properties. YB-1 binds DNA and RNA and plays a role in multiple cellular processes including regulation of transcription and translation, pre-mRNA splicing, DNA reparation and mRNA packaging. YB-1 is also a component of messenger ribonucleoprotein complexes and may have a role in microRNA processing. Aberrant expression of YB-1 is associated with cancer proliferation in numerous tissues.

Target

Human YB-1

Immunogen

Recombinant human YB-1

Isotype

IgG1

Source/Host

Mouse

Species Reactivity

Human

Clone

21A3

Purification

Protein G purified.
Purity>95%. Determined by SDS-PAGE

Conjugate

Functional Grade

Applications

Immunohistochemistry (paraffin), WB

Molecular Weight

150 kDa

Format

0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility

Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	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. The secreted form acts as an extracellular mitogen and stimulates cell migration and proliferation.
Keywords	YBX1;Y box binding protein 1;YB1;BP-8;CSDB;DBPB;YB-1;CSDA2;NSEP1;NSEP-1

GENE INFORMATION

Official Symbol	Y box binding protein 1
Synonyms	YBX1; Y box binding protein 1; YB1; BP-8; CSDB; DBPB; YB-1; CSDA2; NSEP1; NSEP-1
References	Hanzawa, K., et al. (2010). "Y-box binding protein-1 expression in diffuse large B-cell lymphoma: an impact on prognosis in the rituximab era." <i>Leuk Lymphoma</i> 51(11): 2054-2062. PubMed;