



YBX1 blocking peptide (DAG-P2031)

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

PRODUCT INFORMATION

Antigen Description	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.
Conjugate	Unconjugated
Applications	BL
Sequence Similarities	Contains 1 CSD (cold-shock) domain.
Format	Liquid
Buffer	Information available upon request.
Preservative	None
Storage	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name [YBX1 Y box binding protein 1 \[Homo sapiens \(human\) \]](#)

Official Symbol	YBX1
Synonyms	YBX1; Y box binding protein 1; YB1; BP-8; CSDB; DBPB; YB-1; CSDA2; NSEP1; NSEP-1; MDR-NF1; nuclease-sensitive element-binding protein 1; CBF-A; EFI-A; DNA-binding protein B; Y-box-binding protein 1; Y-box transcription factor; enhancer factor I subunit A; nuclease sensitive element binding protein 1; CCAAT-binding transcription factor I subunit A; major histocompatibility complex, class II, Y box-binding protein I;
Entrez Gene ID	4904
mRNA Refseq	NM_004559.3
Protein Refseq	NP_004550.2
UniProt ID	P67809
Chromosome Location	1p34
Pathway	BDNF signaling pathway, organism-specific biosystem; Gene Expression, organism-specific biosystem; Processing of Capped Intron-Containing Pre-mRNA, organism-specific biosystem; SIDS Susceptibility Pathways, organism-specific biosystem; Signaling events mediated by PTP1B, organism-specific biosystem; mRNA Splicing, organism-specific biosystem; mRNA Splicing - Major Pathway, organism-specific biosystem; mRNA processing, organism-specific biosystem;
Function	DNA binding; DNA binding; RNA binding; double-stranded DNA binding; poly(A) RNA binding; protein binding; sequence-specific DNA binding transcription factor activity; single-stranded DNA binding;