

Datasheet for ABIN3044148
anti-YBX1 antibody (Middle Region)



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1 Image

Overview

Quantity:	100 µg
Target:	YBX1
Binding Specificity:	AA 137-152, Middle Region
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This YBX1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-YB1/YBX1 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human YB1, identical to the related rat and mouse sequences.
Sequence:	KYAADRNHYR RYPRRR
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-YB1/YBX1 Antibody (ABIN3044148). Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: YBX1

Alternative Name: YBX1 ([YBX1 Products](#))

Background: Synonyms: 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,
Tissue Specificity: In lung, HT-29 colonic epithelial cells, Raji B-lymphoblasts. Lesser extent in brain, heart, kidney, liver and placenta. Not expressed in CD4+ or CD8+ T-cells. Expressed in the T-cell lines HARRIS, HuT 78, Jurkat and SUP-T1, but not in the T- cell lines Peer, MOLT-4, HSB and YT. .
Background: YBX1 (Y box binding protein 1), commonly referred to as "YB-1" by researchers, is a human protein. YB1 binding has an absolute requirement for the CCAAT box and relative specificity for the Y box. It has a molecular mass of 35,414 and contains 18 % basic residues and putative nuclear localization signals. The YBX1 gene is mapped on 1p34.2. Ybx1 was highly expressed in mouse erythroid myeloid lymphoid clone-1 (EML), a hematopoietic precursor cell line, but that it was downregulated in myeloid progenitors and in Gmcsf-treated EML cells during myeloid differentiation. Ybx1 was expressed at high levels in myeloid leukemic cells at different developmental stages. Knockdown of YBX1 in a human leukemic cell line inhibited proliferation ability, induced apoptosis, and induced megakaryocytic differentiation in response to arsenic trioxide treatment. YBX1 is downregulated during myeloid differentiation and aberrant YBX1 expression in leukemic cells may contribute to leukemia development by blocking differentiation.
Sequence Similarities: Contains 1 CSD (cold-shock) domain.

Molecular Weight: 50 kDa

UniProt: [P67809](#)

Pathways: [Regulation of Muscle Cell Differentiation](#)

Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat
Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/mL, Human, Mouse, Rat
Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells, Human

Application Details

1. Bhullar, J., Sollars, V. E. YBX1 expression and function in early hematopoiesis and leukemic cells. Immunogenetics 63: 337-350, 2011. 2. Fukada, T., Tonks, N. K. Identification of YB-1 as a regulator of PTP1B expression: implications for regulation of insulin and cytokine signaling. EMBO J. 22: 479-493, 2003. 3. Makino, Y., Ohga, T., Toh, S., Koike, K., Okumura, K., Wada, M., Kuwano, M., Kohno, K. Structural and functional analysis of the human Y-box binding protein (YB-1) gene promoter. Nucleic Acid Res. 24: 1873-1878, 1996.

Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Anti- YBX1 antibody, Western blotting All lanes: Anti YBX1 at 0.5ug/ml WB: Whole Cell Lysate at 40ug Predicted bind size: 50KD Observed bind size: 50KD