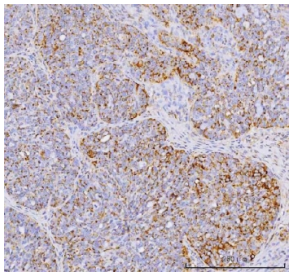
YB1 Antibody / YBX1 / Y box binding protein 1 (R30851)

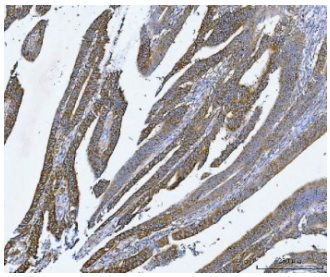
Catalog No.	Formulation	Size
R30851	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

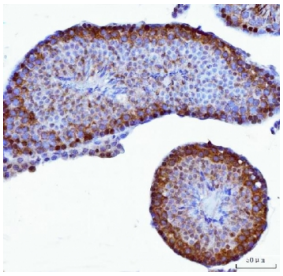
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P67809
Localization	Nuclear and cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This YB1 antibody is available for research use only.



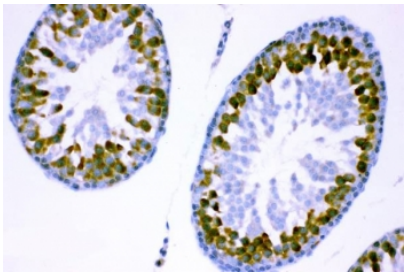
IHC staining of FFPE human ovarian cancer tissue with YB1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



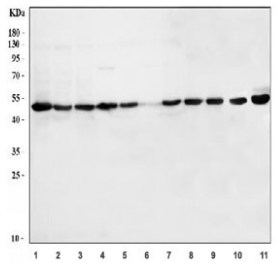
IHC staining of FFPE human rectal cancer tissue with YB1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



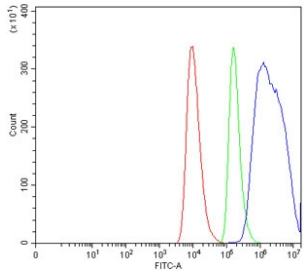
IHC staining of FFPE mouse testis tissue with YB1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat testis tissue with YB1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human MCF7, 2) human 293T, 3) human HeLa, 4) human Jurkat, 5) human T-47D, 6) human ThP-1, 7) human MOLT-4, 8) human HL60, 9) rat testis, 10) mouse stomach and 11) mouse testis tissue lysate with YB1 antibody. Expected molecular weight: 39-50 kDa depending on glycosylation level.



Flow cytometry testing of human HEL cells with YB1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= YB1 antibody.

Description

Y box binding protein 1, commonly referred to as YBX1 or just YB1 by researchers, is a human protein. YBX1 binding has an absolute requirement for the CCAAT box and relative specificity for the Y box. It has a molecular mass of 35,414D and contains 18% basic residues and putative nuclear localization signals. The protein is highly expressed in mouse erythroid myeloid lymphoid clone-1 (EML), a hematopoietic precursor cell line, but is downregulated in myeloid progenitors and in Gmcsf-treated EML cells during myeloid differentiation. YBX1 is expressed at high levels in myeloid leukemic cells at different developmental stages. Knockdown of the protein 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 expression in leukemic cells may contribute to leukemia

development by blocking differentiation.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the YB1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the middle region of human YBX1 (KYAADRNHYRRYPRRR) was used as the immunogen for this YB1 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the YB1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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