IBL Data Sheet

Code No. 11106

Anti-Human
YB-1 (21A3) Mouse IgG MoAb

Volume : 100 µg

Introduction : YB-1 (Y-box binding protein-1) contains a highly conserved cold shock domain and is a transcription factor that binds to a CCAAT box. It has been reported that P-glycoprotein is highly expressed in cisplatin-resistant cancer cell lines since the sequence of CCAAT box is located in the promoter region of the drug-resistance gene MDR1, and YB-1 is involved in transcription of P-glycoprotein, the product of the MDR1 gene. YB-1 is usually present in the cytoplasm, but it translocates into the nucleus in cancer cells that have been exposed to UV radiation or anticancer drugs. And it is thought to be involved in DNA damage or repair in association with PCNA or p53. YB-1 is also highly expressed in the nucleus in about half of non-small cell lung cancers, and the outcome has been reported to be particularly poor in cases of squamous cell carcinoma in which it is expressed in the nucleus (ref. 1).

Antigen : Recombinant human YB-1

Source : Mouse-Mouse hybridoma
(X63 - Ag 8.653 × BALB/c mouse spleen cells, supernatant)

Clone : 21A3 **Subclass** : IgG_1

Purification : Affinity purified with protein A

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN_3

How to use : 1.0 mL deionized water will be added to the product, then its concentration comes to 100 µg/mL

Stability : Lyophilized product, 5 years at 2 - 8 °C
: Solution, 2 years at –20 °C

Application : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues by several techniques such as Avidin Biotin Complex (ABC) Method after microwave pretreatment (for 10 minutes in 10mM Citrate Buffer, pH 6.0). The optimal concentration is 1 - 5 µg/mL, however, the concentration should be optimized by each laboratory.
: This antibody can be used for western blotting in concentration about 1 µg/mL

Reference :

1. Shibahara K, Sugio K, Osaki T, Uchiumi T, Maehara Y, Kohno K, Yasumoto K, Sugimachi K, Kuwano M. Nuclear expression of the Y-box binding protein, YB-1, as a novel marker of disease progression in non-small cell lung cancer. Clin Cancer Res. 2001 Oct;7(10):3151-5.
2. Janz M, Harbeck N, Dettmar P, Berger U, Schmidt A, Jurchott K, Schmitt M, Royer HD. Y-box factor YB-1 predicts drug resistance and patient outcome in breast cancer independent of clinically relevant tumor biologic factors HER2, uPA and PAI-1. Int J Cancer. 2002 Jan 20;97(3):278-82.
3. Yasen M, Kajino K, Kano S, Tobita H, Yamamoto J, Uchiumi T, Kon S, Maeda M, Obulhasim G, Arii S, Hino O. The up-regulation of Y-box binding proteins (DNA binding protein A and Y-box binding protein-1) as prognostic markers of hepatocellular carcinoma. Clin Cancer Res. 2005 Oct 15;11(20):7354-61.

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