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Product Information

Monoclonal Anti-ZBBX antibody produced in mouse clone Zbx-7, purified from hybridoma cell culture

Catalog Number **SAB4200632**

Product Description

Monoclonal Anti-ZBBX (mouse IgG2a isotype) is derived from the hybridoma Zbx-7 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to an internal sequence of human ZBBX (GeneID: 79740), conjugated to KLH. The corresponding sequence differs by a single amino acid in monkey and by 6 amino acids in mouse ZBBX. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti- ZBBX recognizes human ZBBX. The product may be used in several immunochemical techniques including immunoblotting (~100kDa), flow cytometry, immunofluorescence and immunohistochemistry. Detection of the ZBBX band by immunoblotting is specifically inhibited by the immunizing peptide.

The B-box family represents a large number of genes involved in functions such as axial patterning, growth control, differentiation, and transcriptional regulation. Mutations or rearrangements in several B-box family members are associated with human diseases and cancers.[1] A member of this family, ZBBX (Zinc finger B-box domain-containing protein 1) is located on chromosome 3q26.1. This protein was reported to be involved in Attention Deficit Hyperactivity Disorder (ADHD), a common and persistent condition, characterized by developmentally atypical and impairing inattention, hyperactivity, and impulsiveness. Either rare copy number variations or *de novo* deletion in the ZBBX gene were found in several genomic studies of ADHD patients.[2-4] In addition, ZBBX was also suggested to function as a tumor suppressor gene in HCC.[5]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For extended storage, freeze at −20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunofluorescence: a working concentration of 2-4 μg/mL is recommended using MCF7 cells.

Immunohistochemistry: a working antibody concentration of 20 μg/mL is recommended using human liver tissue sections.

Flow Cytometry: a working dilution of 5-10 μg /test is recommended using HeLa cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Torok, M., and Etkin, L.D., *Differentiation*, **67**, 63-71 (2001).
2. Lionel, A.C., et al., *Sci. Transl. Med.***, 3**, 95ra75 (2011).
3. Lesch, K.P., et al., *Mol. Psychiatry*, **16**, 491-503 (2011).
4. Elia, J., et al., *Mol. Psychiatry*, **15**, 637–646 (2010).
5. Zender, L., et al., *J. Hepatol.*, **52**, 921-929 (2010).

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