

FOX1 (A2BP1) Antibody

Mouse monoclonal antibody Catalog # AN1242

Specification

FOX1 (A2BP1) Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IF <u>O9NWB1</u> Bovine, Human, Mouse, Rat Mouse monoclonal IgG1 46/48 KDa

FOX1 (A2BP1) Antibody - Additional Information

Gene ID54715Gene NameRBFOX1Other NamesRNA binding protein fox-1 homolog 1, Ataxin-2-binding protein 1, Fox-1 homolog A,
Hexaribonucleotide-binding protein 1, RBFOX1, A2BP, A2BP1, FOX1, HRNBP1

Target/Specificity Recombinant protein taken from the N-terminus of human FOX1 expressed in and purified from E. Coli.

Dilution WB~~ 1:5000 IF~~ 1:500

Format Affinity purified from tissue culture supernatant.

Antibody Specificity Specific for the ~46/48k FOX1 protein doublet.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions FOX1 (A2BP1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

FOX1 (A2BP1) Antibody - Protocols



Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FOX1 (A2BP1) Antibody - Images



Western blot of rat cortex lysate showing specific immunolabeling of the ~46/48k FOX1 protein.



Immunofluorescence of cultured rat neurons showing nuclear and distal cytoplasmic staining of FOX1 in green.

FOX1 (A2BP1) Antibody - Background

FOX1, also known as ataxin-2 binding protein 1 (A2BP1), is a neuron specific RNA-binding protein that has been shown to regulate a wide range of alternative splicing events implicated in neuronal development and maturation including transcription factors and synaptic proteins (Fogel et al., 2012). Defects in FOX1 have also been associated with autism (Martin et al., 2007), attention-deficit hyperactivity disorder (Elia et al., 2010) and schizophrenia (Xu et al., 2008).

FOX1 (A2BP1) Antibody - References



Elia J, Gai X, Xie HM, Perin JC, Geiger E, Glessner JT, D'arcy M, deBerardinis R, Frackelton E, Kim C, Lantieri F, Muganga BM, Wang L, Takeda T, Rappaport EF, Grant SF, Berrettini W, Devoto M, Shaikh TH, Hakonarson H, White PS. (2010) Rare structural variants found in attention-deficit hyperactivity disorder are preferentially associated with neurodevelopmental genes. Mol Psychiatry. Jun;15(6):637-46.

Fogel BL, Wexler E, Wahnich A, Friedrich T, Vijayendran C, Gao F, Parikshak N, Konopka G, Geschwind DH. (2012) RBFOX1 regulates both splicing and transcriptional networks in human neuronal development. Hum Mol Genet. Oct 1;21(19):4171-86.

Martin CL, Duval JA, Ilkin Y, Simon JS, Arreaza MG, Wilkes K, Alvarez-Retuerto A, Whichello A, Powell CM, Rao K, Cook E, Geschwind DH. (2007) Cytogenetic and molecular characterization of A2BP1/FOX1 as a candidate gene for autism. Am J Med Genet B Neuropsychiatr Genet. Oct 5;144B(7):869-76.

Xu B, Roos JL, Levy S, van Rensburg EJ, Gogos JA, Karayiorgou M. (2008) Strong association of de novo copy number mutations with sporadic schizophrenia. Nat Genet. Jul;40(7):880-5.