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RFX1 Antibody

Catalog # ASC11932

Product Information

Application	WB, E
Primary Accession	P22670
Other Accession	NP_002909, 238859557
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	104758
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	RFX1 antibody can be used for detection of RFX1 by Western blot at 1 - 2 g/ml.

Additional Information

Gene ID	5989
Other Names	MHC class II regulatory factor RFX1, Enhancer factor C, EF-C, Regulatory factor X 1, RFX, Transcription factor RFX1, RFX1
Target/Specificity	RFX1; RFX1 antibody is human specific. At least two isoforms of RFX1 are known to exist; this antibody will detect both isoforms.
Reconstitution & Storage	RFX1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	RFX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RFX1
Function	Regulatory factor essential for MHC class II genes expression. Binds to the X boxes of MHC class II genes. Also binds to an inverted repeat (ENH1) required for hepatitis B virus genes expression and to the most upstream element (alpha) of the RPL30 promoter.
Cellular Location	Nucleus.

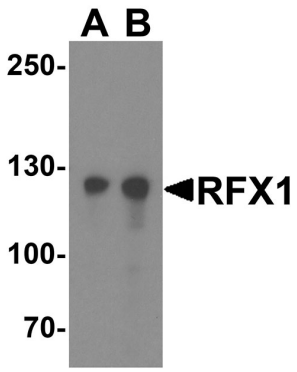
Background

RFX1 is a member of the regulatory factor X protein family, which are transcription factors that contain a highly-conserved winged helix DNA binding domain and the D region found in the C-terminal part of these proteins which facilitates dimerization (1,2). RFX1 is structurally related to regulatory factors X2, X3, X4, and X5 (3). RFX1 is a regulatory factor essential for MHC class II genes expression and can bind to an inverted repeat that is required for expression of hepatitis B virus genes (4). Recent study identifies RFX1 may play a tumor suppressor role in HCC as autophagy mediator (5).

References

Reith W, Ucla C, Barras E, et al. RFX1, a transactivator of hepatitis B virus enhancer I, belongs to a novel family of homodimeric and heterodimeric DNA-binding proteins. Mol. Cell Biol. 1994; 14:1230-44.
Katan-Khaykovich Y and Shaul Y. RFX1, a single DNA-binding protein with a split dimerization domain, generates alternative complexes. J. Biol. Chem. 1998; 273:24504-12.
Hsu YC, Liao WC, Kao CY, et al. Regulation of FGF1 gene promoter through transcription factor RFX1. J. Biol. Chem. 2010; 285:13885-95.
Su JC, Tseng PH, Hsu CY, et al. RFX1-dependent activation of SHP-1 induces autophagy by a novel obatoclax derivative in hepatocellular carcinoma cells. Oncotarget 2014; 5:4909-19.

Images



Western blot analysis of RFX1 in HeLa cell lysate with RFX1 antibody at (A) 1 and (B) 2 µg/ml.