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MLXIPL Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12562b

Product Information

Application	IHC-P, WB, E
Primary Accession	Q9NP71
Other Accession	NP_116571.1, NP_116569.1
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31107
Calculated MW	93073
Antigen Region	624-653

Additional Information

Gene ID	51085
Other Names	Carbohydrate-responsive element-binding protein, ChREBP, Class D basic helix-loop-helix protein 14, bHLHd14, MLX interactor, MLX-interacting protein-like, WS basic-helix-loop-helix leucine zipper protein, WS-bHLH, Williams-Beuren syndrome chromosomal region 14 protein, MLXIPL, BHLHD14, MIO, WBSCR14
Target/Specificity	This MLXIPL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 624-653 amino acids from the C-terminal region of human MLXIPL.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MLXIPL Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MLXIPL

Synonyms	BHLHD14, MIO, WBSCR14
Function	Binds DNA as a heterodimer with MLX/TCFL4 and activates transcription. Binds to the canonical E box sequence 5'-CACGTG-3'. Plays a role in transcriptional activation of glycolytic target genes. Involved in glucose-responsive gene regulation (By similarity). Regulates transcription in response to changes in cellular carbohydrate abundance such as occurs during fasting to feeding metabolic transition. Refeeding stimulates MLXIPL/ChREBP transcription factor, leading to increased BCKDK to PPM1K expression ratio, phosphorylation and activation of ACLY that ultimately results in the generation of malonyl-CoA and oxaloacetate immediate substrates of de novo lipogenesis and gluconeogenesis, respectively (By similarity).
Cellular Location	Nucleus.
Tissue Location	Expressed in liver, heart, kidney, cerebellum and intestinal tissues

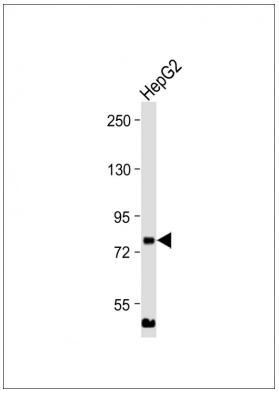
Background

This gene encodes a basic helix-loop-helix leucine zipper transcription factor of the Myc/Max/Mad superfamily. This protein forms a heterodimeric complex and binds and activates, in a glucose-dependent manner, carbohydrate response element (ChoRE) motifs in the promoters of triglyceride synthesis genes. The gene is deleted in Williams-Beuren syndrome, a multisystem developmental disorder caused by the deletion of contiguous genes at chromosome 7q11.23.

References

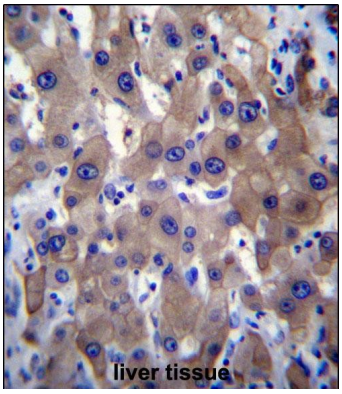
Hu, M., et al. Pharmacogenet. Genomics 20(10):634-637(2010)
Johansen, C.T., et al. Nat. Genet. 42(8):684-687(2010)
Keebler, M.E., et al. Circ Cardiovasc Genet 3(4):358-364(2010)
Chidambaram, M., et al. Metab. Clin. Exp. (2010) In press :
Reynolds, C.A., et al. Hum. Mol. Genet. 19(10):2068-2078(2010)

Images



Anti-MLXIPL Antibody (C-term) at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 93 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

MLXIPL Antibody (C-term) (Cat. #AP12562b)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MLXIPL Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



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