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MLXIPL Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12562b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9NP71
Other Accession	NP_116571.1, NP_116569.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Chicken
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	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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

Function	Glucose-responsive transcription activator that regulates fatty acid synthesis and glycolysis. Key determinant of systemic insulin sensitivity and glucose homeostasis. Important for the expression of fatty acid synthetic enzymes, including PC/Pcx, APOC4/Acl, ACACA/Acc1 and FASN/Fas (By similarity). Important for glucose-induced expression of L-type pyruvate kinase/PKLR (By similarity). Binds to the canonical and non-canonical E box DNA sequences 5'-CACGTG-3' and 5'-CACGCG-3' (By similarity). May also act as a transcriptional repressor (By similarity).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q8VIP2}. Nucleus {ECO:0000250|UniProtKB:Q8VIP2}. Note=Localizes mainly in the cytoplasm of hepatocytes under low glucose and migrates into the nucleus under high glucose. {ECO:0000250|UniProtKB:Q8VIP2}
Tissue Location	Widely expressed with high levels in heart, brain, placenta, skeletal muscle and pancreas. Also expressed in fetal kidney, lung, liver and brain (PubMed:9860302). Expressed in fetal and adult liver (PubMed:10780788). Expressed in the cerebral cortex, including in the frontal, temporal, parietal and occipital lobes, and the cerebellum. Also detected in the intestine, including jejunum, ileum and colon (PubMed:11230181).

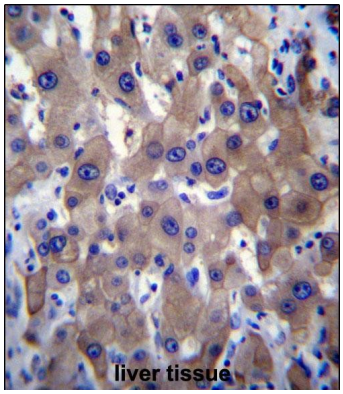
Background

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



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.