

MLXIPL Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP12562b**Specification**

MLXIPL Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q9NP71](#)**MLXIPL Antibody (C-term) Blocking peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MLXIPL Antibody (C-term) Blocking peptide - 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

MLXIPL Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MLXIPL Antibody (C-term) Blocking peptide - Images

MLXIPL Antibody (C-term) Blocking peptide - 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.

MLXIPL Antibody (C-term) Blocking peptide - 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)