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MLXIP Antibody

Catalog # ASC12034

Product Information

Application	WB, E
Primary Accession	Q9HAP2
Other Accession	111955326, NP_055753, 22877
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	101185
Application Notes	MLXIP antibody can be used for Western blot at 1 - 2 g/mL.

Additional Information

Gene ID	22877
Other Names	MLXIP Antibody: FB22, HM89, LAP3, LCR1, NPYR, WHIM, CD184, LESTR, NPY3R, NPYRL, HSY3RR, NPYY3R, D2S201E
Precautions	MLXIP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MLXIP (HGNC:17055)
Function	Binds DNA as a heterodimer with MLX 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.
Cellular Location	Cytoplasm. Nucleus {ECO:0000255|PROSITE- ProRule:PRU00981, ECO:0000269|PubMed:12446771, ECO:0000269|PubMed:16782875}. Mitochondrion outer membrane Note=Predominantly cytoplasmic but shuttles between cytoplasm and nucleus when associated with MLX. Also associates with the outer mitochondrial membrane and may shuttle between the outer mitochondrial membrane and the nucleus. {ECO:0000250|UniProtKB:Q2VPU4, ECO:0000269|PubMed:12446771, ECO:0000269|PubMed:16782875}
Tissue Location	Widely expressed in adult tissues. Most abundant in skeletal muscle.

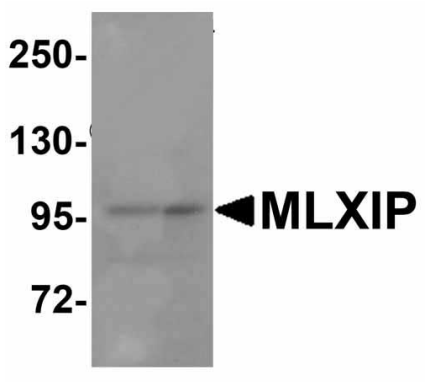
Background

MLXIP Antibody: MLXIP is a member of the Myc superfamily of transcription factors and functions as part of a heterodimer with Max-like protein X (MLX) to activate transcription (1). MLXIP contributes to the regulation of glucose homeostasis as the MLXIP/MLX heterodimer activates expression of thioredoxin-interacting protein (TXNIP), a potent inhibitor of cellular glucose uptake and aerobic glycolysis. The mammalian target of rapamycin (mTOR) suppresses the activation of the TXNIP pathway by binding to MLXIP, thereby preventing the MLXIP/MLX heterodimer formation (2). MLXIP interaction with Myc may also be involved in metabolic reprogramming and tumorigenesis (3).

References

Billin AN, Eilers AL, Coulter KL, et al. MondoA, a novel basic helix-loop-helix-leucine zipper transcriptional activator that constitutes a positive branch of a max-like network. Mol. Cell Biol. 2000; 20:8845-54.;Kaadige MR, Yang J, Wilde BR, et al. MondoA-Mlx transcriptional activity is limited by mTOR-MondoA interaction. Mol. Cell Biol. 2015; 35:101-10.;Carroll PA, Diolaiti D, McFerrin L, et al. Deregulated Myc requires ModoA/Mlx for metabolic reprogramming and tumorigenesis. Cancer Cell 2015; 27:271-85.;

Images



Western blot analysis of MLXIP in MCF7 cell lysate with MLXIP antibody at 1 µg/mL.

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