

**MLX Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8638c**

**Specification**

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**MLX Antibody (Center) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">O9UH92</a>
Other Accession	<a href="#">O08609</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	33300
Antigen Region	125-151

**MLX Antibody (Center) - Additional Information**

**Gene ID** 6945

**Other Names**

Max-like protein X, Class D basic helix-loop-helix protein 13, bHLHd13, Max-like bHLHZip protein, Protein BigMax, Transcription factor-like protein 4, MLX, BHLHD13, TCFL4

**Target/Specificity**

This MLX antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 125-151 amino acids from the Central region of human MLX.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**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**

MLX Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**MLX Antibody (Center) - Protein Information**

**Name** MLX

**Synonyms** BHLHD13, TCFL4

**Function** Transcription regulator. Forms a sequence-specific DNA- binding protein complex with MAD1, MAD4, MNT, WBSCR14 and MLXIP which recognizes the core sequence 5'-CACGTG-3'. The TCFL4-MAD1, TCFL4-MAD4, TCFL4-WBSCR14 complexes are transcriptional repressors. Plays a role in transcriptional activation of glycolytic target genes. Involved in glucose-responsive gene regulation.

**Cellular Location**

[Isoform Alpha]: Cytoplasm. Note=Found predominantly in the cytoplasm (PubMed:10918583).

[Isoform Gamma]: Nucleus. Note=Found predominantly in the nucleus (PubMed:10918583).

**Tissue Location**

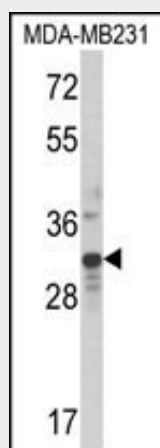
Expressed in all tissues tested, including spleen, thymus, prostate, ovary, intestine, colon, peripheral blood leukocyte, heart, liver, skeletal muscle and kidney. Lower levels of expression in testis, brain, placenta and lung.

**MLX Antibody (Center) - Protocols**

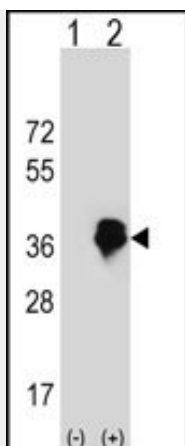
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

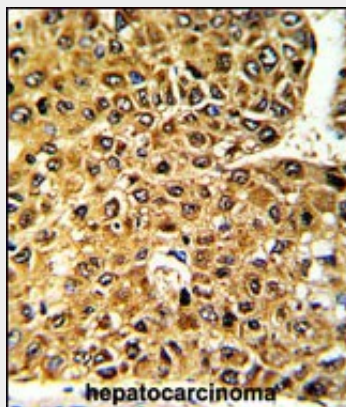
**MLX Antibody (Center) - Images**



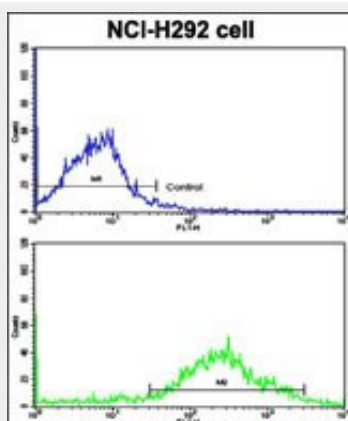
Western blot analysis of MLX Antibody (Center) (Cat. #AP8638c) in MDA-MB231 cell line lysates (35ug/lane). MLX (arrow) was detected using the purified Pab.



Western blot analysis of MLX (arrow) using rabbit polyclonal MLX Antibody (Center) (Cat. #AP8638c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the MLX gene.



Formalin-fixed and paraffin-embedded human hepatocarcinoma with MLX Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of NCI-H292 cells using MLX Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **MLX Antibody (Center) - Background**

MLX belongs to the family of basic helix-loop-helix leucine zipper (bHLH-Zip) transcription factors.

These factors form heterodimers with Mad proteins and play a role in proliferation, determination and differentiation. This protein may act to diversify Mad family function by its restricted association with a subset of the Mad family of transcriptional repressors, namely, Mad1 and Mad4.

#### **MLX Antibody (Center) - References**

Meroni,G., et.al., Oncogene 19 (29), 3266-3277 (2000)  
Billin,A.N., et.al., J. Biol. Chem. 274 (51), 36344-36350 (1999)