

Applications: W, IP, ChIP	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 30 to 50	<b>Source/Isotype:</b> Rabbit IgG	UniProt ID: #Q9UH92	Entrez-Gene Id: 6945
Product Usage Information		For optimal ChIP results, use 5 μl of antibody and 10 μg of chromatin (approximately 4 x 10 <sup>6</sup> cells) per IP. This antibody has been validated using SimpleChIP <sup>®</sup> Enzymatic Chromatin IP Kits.				
		<b>Application</b> Western Blotting Immunoprecipitation Chromatin IP			<b>Dilution</b> 1:1000 1:100 1:100	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.				
Specificity/Sensitivity		MLX (D8G6W) Rabbit mAb recognizes endogenous levels of total MLX protein. This antibody detects all known isoforms of MLX, including MLX alpha, beta, gamma, delta, and epsilon.				
Source / Purification		Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val286 of human MLX protein.				
Background		Max-like protein X (MLX), also known as transcription factor-like protein 4 (TCFL4), is a member of the Myc/Max/Mad network of transcriptional regulator proteins that share a common basic-helix-loop-helix zipper (bHLH-ZIP) motif required for dimerization and DNA-binding (1,2). MLX is ubiquitously expressed in most cell lines and functions as a binding partner for MLXIP (also known as MondoA) and MLXIPL (also known as ChREBP) (1,2). MLX/MLXIP and MLX/MLXIPL heterodimers function to regulate glucose homeostasis by sensing glucose metabolites in the cell. These heterodimeric protein complexes reside mainly in the cytoplasm and mitochondria of cells grown in low glucose, and translocate to the nucleus upon increased intracellular glucose levels to activate transcription of downstream target genes (1,2). MLX/MLXIP is required for the deregulated Myc-induced reprogramming of multiple metabolic pathways during oncogenesis (3).				
Background References		1. Billin, A.N. and Ayer, D.E. (2006) <i>Curr Top Microbiol Immunol</i> 302, 255-78. 2. Diolaiti, D. et al. (2015) <i>Biochim Biophys Acta</i> 1849, 484-500. 3. Carroll, P.A. et al. (2015) <i>Cancer Cell</i> 27, 271-85.				
Species Reactiv	ity	Species reactivity is de	termined by testing	g in at least one approve	ed application (e.g.,	western blot).
Western Blot Buffer		IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.				
Applications Key		W: Western Blotting IP: Immunoprecipitation ChIP: Chromatin IP				
Cross-Reactivity Key		H: Human M: Mouse R: Rat Mk: Monkey				
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