

# Anti-L-lactyllysine Rabbit mAb

For research use only

## General Information

Catalog number	PTM-1401RM
Host species	Rabbit
Clonality	Recombinant monoclonal
Clone number	9H1L6
Size	100 µl
Form	Liquid

Application	Species reactivity	UniProt	MW (kDa)
Dot Blot, WB, IHC, ICC	All	/	Multiple

## Product Usage Information

Application	Dilution	Positive control
WB	1:1000	HeLa
IHC	1:100	Human colon cancer
ICC/IF	1:100	Raji

## Properties

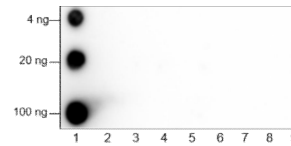
Storage	Instruction	Store at -20°C
		Avoid freeze / thaw cycles
	Preservative	0.01% sodium azide
	Constituents	PBS, glycerol, BSA
Purity	Lactyl-lysine agarose affinity chromatography	
Isotype:	IgG	

## Target Information

Function	Histones are subjected to a variety of enzyme catalyzed modifications, including acetylation, methylation, phosphorylation, ubiquitylation, etc. The Warburg effect, which originally described increased production of lactate in cancer, is associated with diverse cellular processes such as angiogenesis, hypoxia, polarization of macrophages and activation of T cells. This phenomenon is intimately linked to several diseases including neoplasia, sepsis and autoimmune diseases. Lactate, which is converted from pyruvate in tumour cells, is widely known as an energy source and metabolic by-product. Zhang et al. (Nature, 2019) reveal that histone lactylation is a previously unknown histone modification, derived from the cellular metabolite lactate.
Cellular location	Nucleus, cytoplasm
Tissue specificity	/

## Images

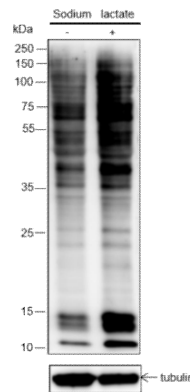
### Dot Blot data



Dot blotting analysis on indicated amount of peptides using anti-Kla rabbit mAb. The list of peptides is included in the table below .

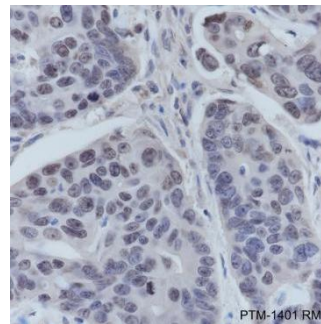
No.	Peptide	No.	Peptide
Lane 1	Kla library	Lane 2	Kac library
Lane 3	Kpr library	Lane 4	Kbu library
Lane 5	Kcr library	Lane 6	Kmal library
Lane 7	Khib library	Lane 8	Ksu library
Lane 9	Library control		

### WB data



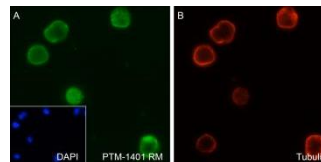
Western blotting analysis on 30 µg of crude proteins from HeLa whole cell with (+) or without (-) treatment of sodium lactate (100 mM, 24hr) using anti-Kla rabbit mAb (1: 1000).

### IHC data



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue, labeling anti-Kla with PTM-1401 RM at 1/100 dilution. Nuclear staining on tumor cells of human colon cancer was observed. Counter stained with hematoxylin. Heat mediated antigen retrieval using Tris/EDTA buffer (pH 9.0).

### ICC data



Immunocytochemistry analysis of Raji (Burkitt's lymphoma cell line), labeling anti-Kla with PTM1401RM at 1/100 dilution. Both nuclear and cytoplasmic staining on Raji cell line. Nuclei were stained with DAPI (blue). Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100.