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LAP1 Monoclonal Antibody (RL13)

Catalog Number **MA1-074**

Product data sheet

Details	
Size	200 µL
Host/Isotope	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	RL13
Immunogen	Pore complex-lamina fraction isolated from rat liver nuclear envelopes.
Conjugate	Unconjugated
Form	Liquid
Concentration	1 mg/mL
Purification	Protein G
Storage buffer	PBS
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles

Species Reactivity	
Species reactivity	Human, Mouse, Rat
Published species	Mouse, Human

Tested Applications	Dilution *
Immunohistochemistry (Paraffin) (IHC (P))	1:20-1:50
Immunoprecipitation (IP)	Assay-dependent
Western Blot (WB)	1:200
Immunocytochemistry (ICC/IF)	1:100

Published Applications	
Western Blot (WB)	See 2 publications below
Immunocytochemistry (ICC/IF)	See 1 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

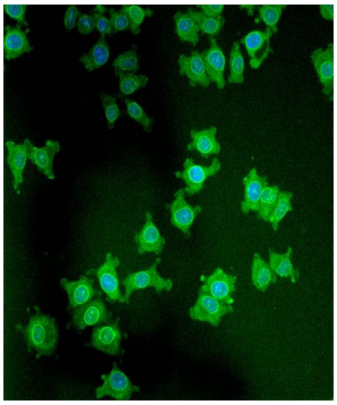
MA1-074 detects lamin associated polypeptide (LAP) 1A, 1B & 1C from rat, human, and mouse samples. This antibody does not cross-react with LAP 2. MA1-074 has been successfully used in Western blot, immunofluorescence, immunohistochemistry, and immunoprecipitation procedures. By Western blot, this antibody detects 3 distinct proteins of molecular weights ~65, ~56 and ~ 51 kDa representing LAP 1A, 1B, and 1C, respectively in rat liver nuclear envelope fractions. Immunofluorescence staining of LAP 1 in rat liver with MA1-074 results in exclusive labeling of the nuclear periphery and exhibits co-localization with lamin staining. The MA1-074 immunogen is pore complex-lamina fraction isolated from rat liver nuclear envelopes.

Background/Target Information

Exopeptidase which selectively removes arginine and/or lysine residues from the N-terminus of several peptide substrates including Arg(0)-Leu-enkephalin, Arg(0)-Met-enkephalin and Arg(-1)-Lys(0)-somatostatin-14. Can hydrolyze leukotriene A4 (LTA-4) into leukotriene B4 (LTB-4).

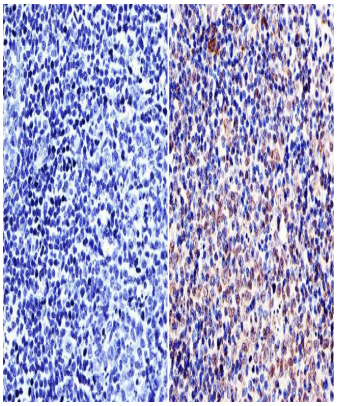
For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Product Images For LAP1 Monoclonal Antibody (RL13)



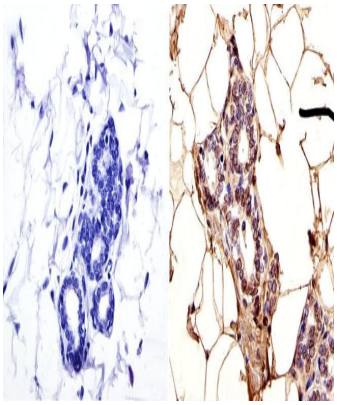
LAP1 Antibody (MA1-074) in ICC/IF

Immunofluorescent analysis of LAP1 using anti-LAP1 monoclonal antibody (Product # MA1-074) shows staining in NS-1 Cells.



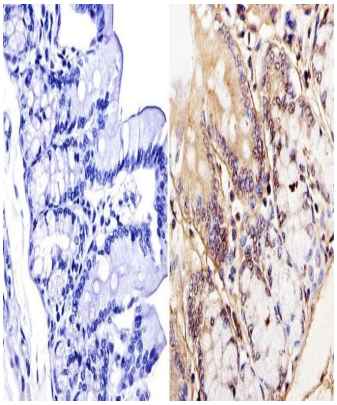
LAP1 Antibody (MA1-074) in IHC

Immunohistochemistry was performed on rat lymph node tissue. To expose target protein, antigen was retreived using 10mM sodium citrate followed by microwave treatment for 8-15 minutes. Endogenous peroxidases were blocked in 3% H202-methanol for 15 minutes and tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a LAP1 mouse monoclonal antibody (Product # MA1-074) at a dilution of 1:50 overnight in a humidified chamber. Tissues were washed in PBST and detection was performed using a secondary antibody conjugated to HRP. DAB staining buffer was applied and tissues were counterstained with hematoxylin and prepped for mounting. Images were taken at 40X magnification.



LAP1 Antibody (MA1-074) in IHC

Immunohistochemistry was performed on rat breast tissue. To expose target protein, antigen was retreived using 10mM sodium citrate followed by microwave treatment for 8-15 minutes. Endogenous peroxidases were blocked in 3% H202-methanol for 15 minutes and tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a LAP1 mouse monoclonal antibody (Product # MA1-074) at a dilution of 1:50 overnight in a humidified chamber. Tissues were washed in PBST and detection was performed using a secondary antibody conjugated to HRP. DAB staining buffer was applied and tissues were counterstained with hematoxylin and prepped for mounting. Images were taken at 40X magnification.



LAP1 Antibody (MA1-074) in IHC

Immunohistochemistry was performed on rat colon tissue. To expose target protein, antigen was retreived using 10mM sodium citrate followed by microwave treatment for 8-15 minutes. Endogenous peroxidases were blocked in 3% H202-methanol for 15 minutes and tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a LAP1 mouse monoclonal antibody (Product # MA1-074) at a dilution of 1:20 overnight in a humidified chamber. Tissues were washed in PBST and detection was performed using a secondary antibody conjugated to HRP. DAB staining buffer was applied and tissues were counterstained with hematoxylin and prepped for mounting. Images were taken at 40X magnification.

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PubMed References For LAP1 Monoclonal Antibody (RL13)

2 Western Blot References

Species / Dilution	Summary
Mouse / Not Cited	MA1-074 was used in western blot to study the role of SUN1 in providing a physical link between the nuclear lamina and the cytoskeleton Molecular and cellular biology (2006; 26: 3738) **"SUN1 interacts with nuclear lamin A and cytoplasmic nesprins to provide a physical connection between the nuclear lamina and the cytoskeleton."** Author(s):Haque F,Lloyd DJ,Smallwood DT,Dent CL,Shanahan CM,Fry AM,Trembath RC,Shackleton S PubMed Article URL:http://dx.doi.org/10.1128/MCB.26.10.3738-3751.2006
Mouse / Not Cited	MA1-074 was used in Western Blotting to show a physical interaction between desmin and lamin B via reciprocal co-immunoprecipitation from muscle tissue of wild type AB zebrafish (Danio rerio, Hamilton). Cytoskeleton (Hoboken, N.J.) (2021; 78: 14) **"Physical evidence on desmin-lamin B interaction."** Author(s):Kural-Mangt E,Dinçer PR PubMed Article URL:http://dx.doi.org/10.1002/cm.21651

1 Immunocytochemistry References

Species / Dilution	Summary
Human / Not Cited	MA1-074 was used in immunocytochemistry to investigate the functional properties of lamin-binding fragment of LAP2 during the cell cycle and progression into S phase The Journal of cell biology (1997; 139: 1077) **"Lamin-binding fragment of LAP2 inhibits increase in nuclear volume during the cell cycle and progression into S phase."** Author(s):Yang L,Guan T,Gerace L PubMed Article URL:http://dx.doi.org/10.1083/jcb.139.5.1077

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