

mCLING labeling kit

Cat.No. 710-MCK; , 50 nmol

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Data Sheet

Reconstitution/ Storage	Content: 710-MCK A: unlabeled mCling, 50 nmol (lyophilized) 710-MCK B: mCLING purification column 710-MCK C: Washing buffer, 10 ml 710-MCK D: Stop solution, 0.5 ml 710-MCK E: Elution buffer, 1 ml 710-MCK F: Neutralization buffer, 0.5 ml Instruction manual
Storage	All components of the kit are stable at 2-8°C. Shelf life before use: 6 months.
Applications	WB: (see remarks) ICC: yes IHC: yes
Remarks	WB: Due to the positive charge of mCLING, negatively charged coatings of coverslips should be avoided. We recommend a positively charged coating like poly-L-lysine (PLL). mCLING is a fixable dye but paraformaldehyde alone is not able to fix this molecule sufficiently. Therefore, a mixture of 4 %paraformaldehyde (PFA) and 0.2 % glutaraldehyde is strongly advised. For detailed protocols see Revelo NH & Rizzoli SO, 2016.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The membrane-binding fluorophore-cysteine-lysine-palmitoyl group (**mCLING**) is a new probe that selectively binds to the plasma membrane. It is taken up during endocytosis and, in contrast to conventional membrane dyes, remains attached to membranes after fixation and permeabilization and can therefore be combined with immunostaining and super-resolution microscopy. mCLING was used so far in mammalian-cultured cells, yeast, bacteria, primary cultured neurons, *Drosophila melanogaster* larval neuromuscular junctions, and mammalian tissue.

Selected References SYSY Antibodies

Dense small molecule labeling enables activator-dependent STORM by proximity mapping.
Chen Y, Gu M, Gunning PW, Russell SM
Histochemistry and cell biology (2016) 146(3): 255-66. **ICC; tested species: human**

Selected General References

Nanoscale architecture of the *Schizosaccharomyces pombe* contractile ring.
McDonald NA, Lind AL, Smith SE, Li R, Gould KL
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SWAP70 Organizes the Actin Cytoskeleton and Is Essential for Phagocytosis.
Baranov MV, Revelo NH, Dingjan I, Maraschini R, Ter Beest M, Honigsmann A, van den Bogaart G
Cell reports (2016) 17(6): 1518-1531.

The Membrane Marker mCLING Reveals the Molecular Composition of Trafficking Organelles.
Revelo NH, Rizzoli SO
Current protocols in neuroscience (2016) 74: 2.25.1-21.

A new probe for super-resolution imaging of membranes elucidates trafficking pathways.
Revelo NH, Kamin D, Truckenbrodt S, Wong AB, Reuter-Jessen K, Reisinger E, Moser T, Rizzoli SO
The Journal of cell biology (2014) 205(4): 591-606.