

## mCLING-DY 654-labeled

Cat.No. 710 006DY1; , 5 nmol mCling

### Data Sheet

Reconstitution/ Storage	5nmol mCLING labeled with DY® 654 in 100 µl PBS (lyophilized). For reconstitution add 100 µl H <sub>2</sub> O, then aliquot and store at -80°C until use. Reconstitute immediately upon receipt! Avoid bright light when working with the probe to minimize photo bleaching of the fluorescent dye.
Applications	<b>ICC:</b> 1 : 75 up to 1 : 250 (0.2 - 0.7 nmol/ml) <b>IHC:</b> 1 : 25 up to 1 : 50 (1 - 2 nmol/ml)
Label	DY 654
Remarks	Due to the positive charge of mCLING, negatively charged coatings of cover-slips 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 General References

Nanoscale architecture of the *Schizosaccharomyces pombe* contractile ring.  
McDonald NA, Lind AL, Smith SE, Li R, Gould KL  
*eLife* (2017) 6: .

SWAP70 Organizes the Actin Cytoskeleton and Is Essential for Phagocytosis.  
Baranov MV, Revelo NH, Dingjan I, Maraspini R, Ter Beest M, Honigmann 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.