Visualization of Vacuole (Acidic compartment) in BY-2

The method is easy way to observe vacuole structure.

Solution

8 mM quinacrin in distilled water

5 mM Hepes-Na (pH 7.5), 0.1 M sorbitol.

Procedure

- -Pick up 80 μ l of cell culture in Eppendorf tube.
- -Add 20 µl of 8 mM quinacrine.
- -After 5 min, wash cell several times with 5 mM Hepes-Na (pH 7.5) containing 0.1 M sorbitol.
- -Observe with fluorescent microscopy, FITC range.

Reference

Yamada K, Fuji K, Shimada T, Nishimura M, Hara-Nishimura I.

Endosomal proteases facilitate the fusion of endosomes with vacuoles at the final step of the endocytotic pathway. *Plant J.* (2005) 41, 888-898.