Product **VectaCell™ Acridine Orange**

Catalog No. **CB-2000**

Amount **2 ml**

Concentration **10 mM**

Storage Conditions **2-8 °C**

**Introduction:**

Acridine Orange is a fluorescent dye that can be used to stain acidic organelles, such as lysosomes, autosomes or yeast vacuoles. At the low pH (inside the organelles), it will emit an orange fluorescence (peak at 590 nm). For optimal endosome visualization use a blue light excitation (475 nm).

Acridine Orange also binds nucleic acids. When bound to double-stranded DNA, it emits a green fluorescence (525 nm); when bound to RNA it fluoresces red (650 nm). For optimal DNA visualization use a 502 nm excitation. For optimal RNA visualization excite at 460 nm.

**Instructions for use:**

1. Prepare Acridine Orange labeling solution by diluting the stock solution 1:1000 with modified PBS (137 mM NaCl, 2.7 mM KCl, 10 mM Na₂HPO₄, 1.8 mM KH₂PO₄, 1 mM CaCl₂, 0.5 mM MgCl₂, pH 7.4).

2. Remove the culture media from cells.

3. Rinse slides three times with PBS.

4. Incubate cells in Acridine Orange labeling solution at 37°C for 15 minutes.

5. Remove labeling solution and rinse cells three times with PBS.

6. Cells grown on coverslips should be mounted onto microscope slides using PBS.

7. Image cells under the fluorescence microscope.