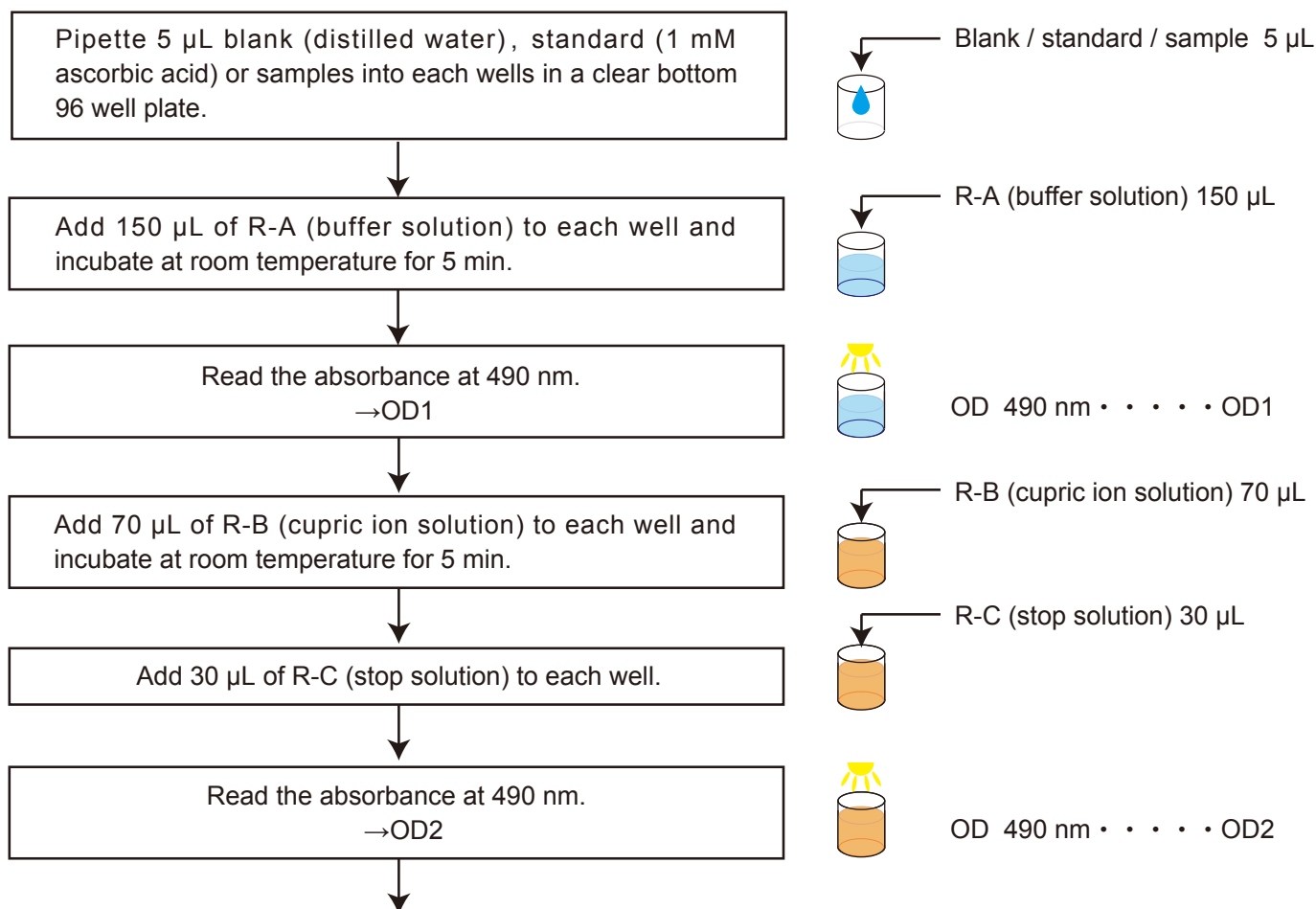


Total Antioxidant Capacity assay kit (Cat.#: AC01DE)

The measurement of TAC (total antioxidant capacity) in various antioxidants.

Total antioxidant capacities of various antioxidants (ascorbic acid, uric acid, glutathione, and *N*-acetyl-cysteine) were measured by Total Antioxidant Capacity Assay kit. The antioxidants were dissolved in distilled water, and diluted to several concentrations (2 mM, 1 mM, 0.25 mM, 0.125 mM, and 0.0625 mM) to prepare assay samples. The assay was carried out according to the instruction manual.

• Assay procedure



Calculations

Calculate TAC (copper reduction ability) of the samples by comparing the ΔOD of the samples to the ΔOD of standard (1 mM ascorbic acid).

$$\Delta OD_{\text{standard}} = (OD2_{\text{standard}} - OD1_{\text{standard}}) - (OD2_{\text{blank}} - OD1_{\text{blank}})$$

$$\Delta OD_{\text{sample}} = (OD2_{\text{sample}} - OD1_{\text{sample}}) - (OD2_{\text{blank}} - OD1_{\text{blank}})$$

Copper reduction ability

$$TAC \text{ (mM)} = \frac{\Delta OD_{\text{sample}}}{\Delta OD_{\text{standard}}} \times 2$$

Total antioxidant capacities of various antioxidants

