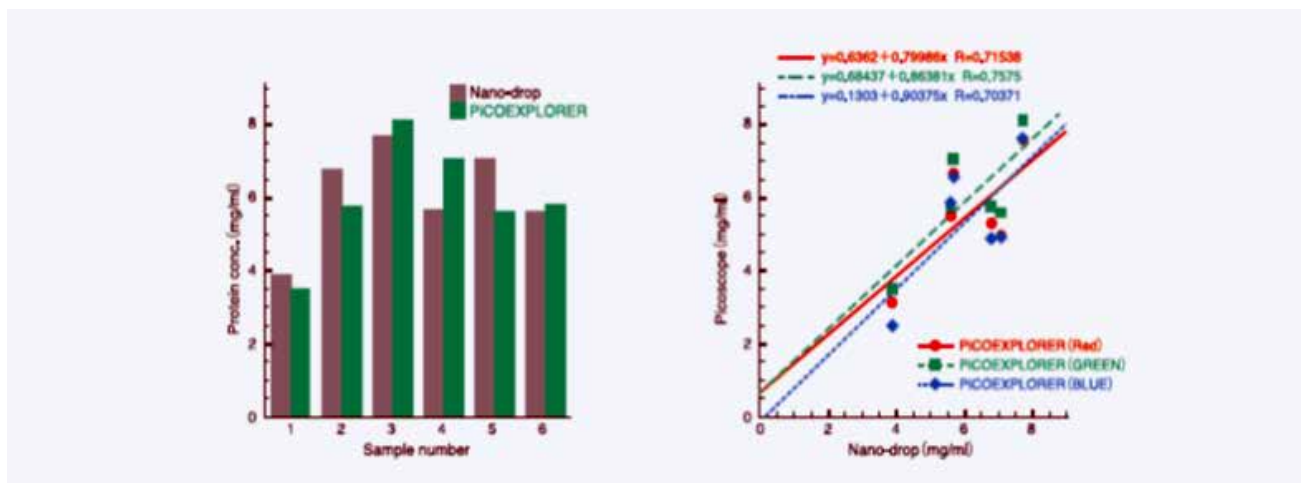


### PiCOEXPLORER PAS-110-YU

## Quantification of protein extracted from tumor transplanted to mouse by BCA method using PiCOEXPLORER

The data below is made available through the generosity of Professor Yoshitaka Matsumoto of the Radiation Oncology group in the Clinical Medicine Department of the Faculty of Medicine at University of Tsukuba.

**Result** Tumor transplanted to mouse was smashed and extracted protein samples were prepared, and then concentration was measured with NanoDrop and PiCOEXPLORER. The results were as follows.  
 \*Measurement liquid volume: 40  $\mu$ L



**Summary** PiCOEXPLORER measures using color sensors for GREEN, BLUE and RED. The results of measurement of samples prepared using the BCA method did not vary greatly between colors and showed good correlation with the measurement values of NanoDrop (R value: 0.70 to 0.75). Measurements using the GREEN sensor showed the best correlation.

**Comments**  
 Yoshitaka Matsumoto/ The Radiation Oncology Group in the Clinical Medicine Department of the Faculty of Medicine at University of Tsukuba

When we started up our new laboratory, we found PiCOEXPLORER when we looked for an inexpensive spectrophotometer that can measure concentration of trace amounts of protein extracted from cells and prepared by the BCA method. While PiCOEXPLORER uses absorption measurement rather than spectroscopy, and requires a sample volume of 40  $\mu$ L rather than the trace amount (2  $\mu$ L) we were looking for, it has advantages in the following respects that more than compensate.

- It is an extremely compact and light-weight instrument, and can easily be carried between experiments rooms or to other experimental facilities.
- It does not require connection to a computer, can be used with the Smartphones and tablet PCs that most people carry these days, minimizes initial cost, and is easy to update.
- It can be used with existing BCA method measurement kits, does not require special reagents, and minimizes cost.



- Features of PiCOEXPLORER**
- Boost Lab Productivity. Absorbance measurement with PiCOEXPLORER. Wavelength range: 400 - 660 nm
  - Your portable, personal tool for Lab work and Field work. Analyze directly in unopened PCR tube (0.2 ml). No sample loss, easy to dispose.
  - Free app for quick results and calibration curves on your smartphone, tablets. Save raw data (absorbance, concentration, intensity) in Excel file on your PC.