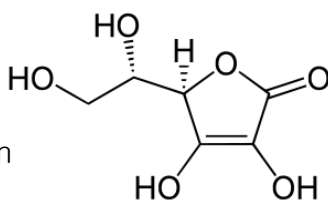


Vitamin C (Ascorbic Acid)

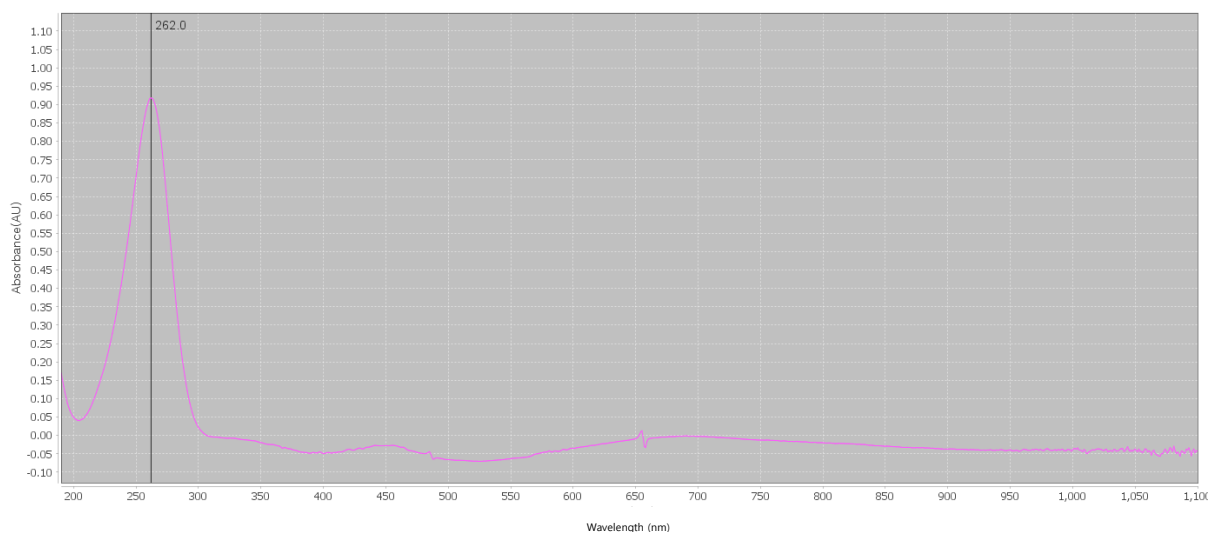
Sample: vitamin supplement
on the market

Absorption wavelength: 262nm

Concentration: 0.225mg/ml (water)

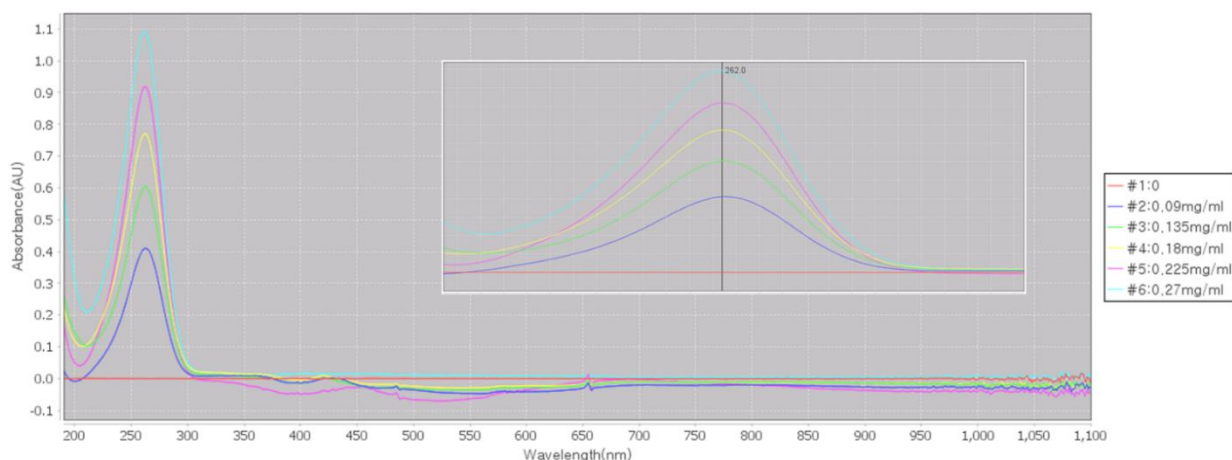


Vitamin C, which is the most typical antioxidative substance that protects the body from the active oxygen, has the following UV-Vis spectrum. Having a double bond with one carbonyl group, this substance absorbs light of wavelength 262nm.



The above experiment was executed in the scan job mode of Alphalook, and showed variance below ± 0.04 nm at the same wavelength even in repeated measurements, demonstrating excellent wavelength reproducibility.

The result of drawing standard curves per each different concentration of the sample is as follows.



The above experiment is the graph obtained from the standard curve job mode of Alphalook.

The highest absorption wavelength per each concentration was 262nm, identical to the result obtained from the scan job mode, and corresponds to the Beer's law, which states that the specimen absorbance is proportional to the concentrations.

The graph below shows the correlation of absorbance to the concentration of standard curve at 262nm, where R2 value showed linearity close to 1, at 0.9957.

