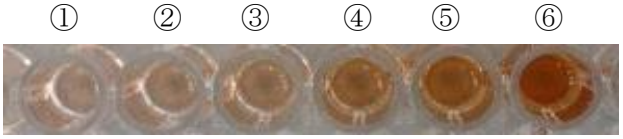
RAPID CRS Evidence Sheet－Cell Proliferation Assay－

【Abstract】
We evaluated the performance of the RAPID CRS for cell proliferation assay. We prepared two conditions such as a plate without sealing and one sealed with RAPID CRS. We measured and compared the absorbance. As a result, we obtain similar trends from two conditions. This indicated the RAPID CRS is useful for cell proliferation assay.

【Methods】
Firstly, we seeded various cell counts of human cancer cells into a 96-well plate, which was subject to incubation in the CO_2 incubator. Secondly, we added Cell Counting Kit-8 (CCK-8) solution to each well of the plate and incubated the plate for color reaction.
Thirdly, after terminating the reaction with a quenching solution, we measured the absorbance of the plate without sealing at 450 nm using a microplate reader (EnVision, PerkinElmer, Inc.). Then, we sealed the plate with RAPID CRS and measured and compared the absorbance of plate without sealing. Finally, the correlation between number of cells and absorbance was showed in a graph.

【Results】

Sealing the plate with RAPID CRS elevated the absorbance slightly (Table 1). However, regarding the correlation of the number of cells and absorbance, we observed the similar trends between the plate without sealing and one sealed with RAPID CRS (Figure 1). Thus, the RAPID CRS can be a useful seal for cell proliferation assay based on measuring absorbance.



	①	②	③	④	⑤	⑥
Number of Cells (×10³cells/well)	9.4	18.8	37.5	75	150	300
Asorbance (RAPID CRS)	0.165	0.207	0.288	0.413	0.609	0.939
Asorbance (Without Sealing Film)	0.141	0.184	0.265	0.392	0.593	0.923

<Table 1> Absorbance at 450 nm

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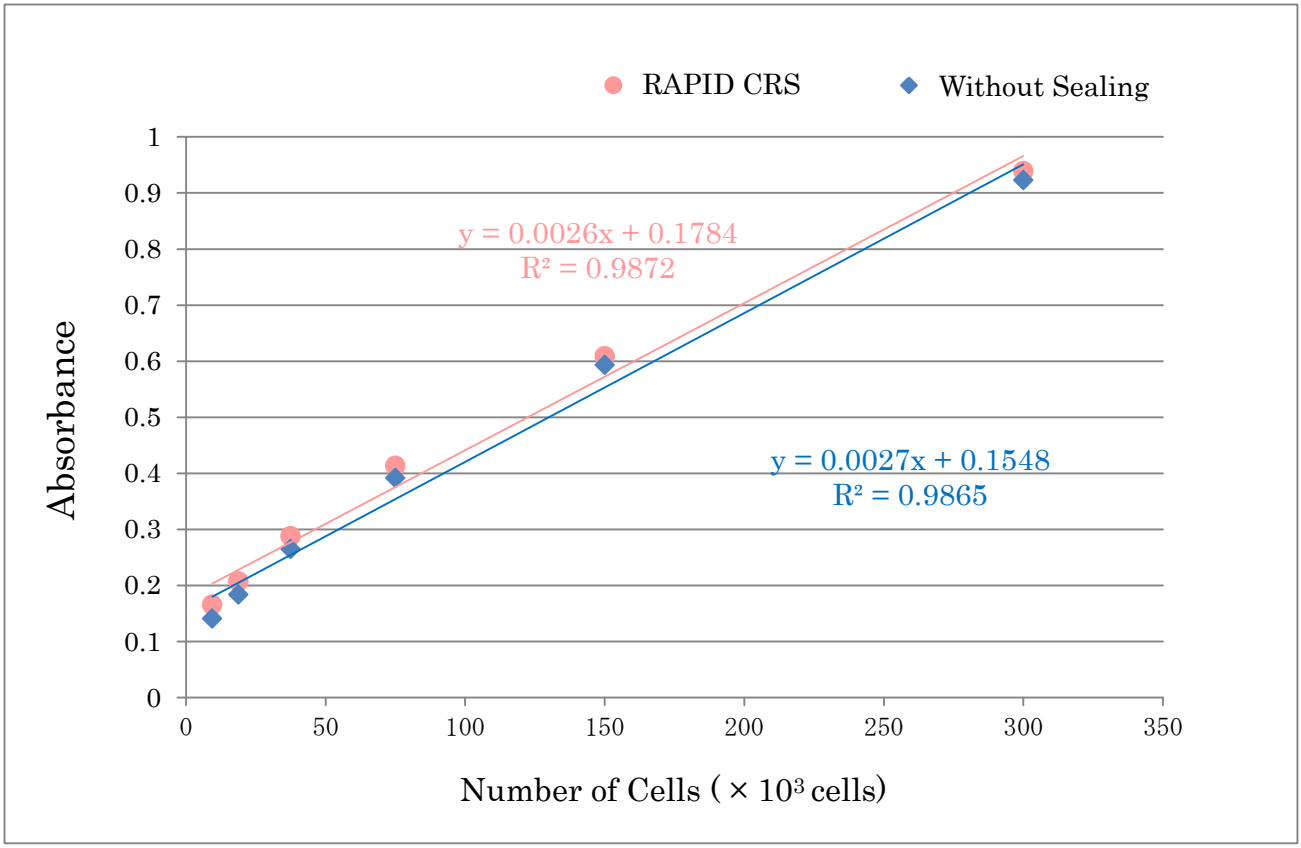

<Figure 1> Correlation between number of cells and absorbance