**A Bacterial Reverse Mutation Test of PROJECT W**

**10 SUMMARY AND CONCLUSION**

In order to assess the potential of PROJECT W to induce gene mutation, a bacterial reverse mutation test was performed with 5 strains of bacteria [*Salmonella typhimurium* (TA98, TA100, TA1535, and TA1537) and *Escherichia coli* (WP2*uvrA*)], using the pre-incubation method with and without metabolic activation. A vehicle (Dimethyl sulfoxide) and 4 known mutagenic compounds were selected as the negative control and positive control articles, respectively.

The dose-finding test and the main test were performed at the following dose levels:

Dose-finding test:

Without and with metabolic activation

5, 15, 50, 150, 500, 1500, and 5000 μg/plate (all test strains)

Main test:

Without and with metabolic activation

156, 313, 625, 1250, 2500, and 5000 μg/plate (all test strains)

• In comparison with the negative control, a 2-fold or greater increase in the number of revertant colonies was not observed in any test strain in the dose-finding test or the main test, without or with metabolic activation.

• Growth inhibition was observed at 5000 μg/plate in TA98, TA100, and TA1537 without metabolic activation in the dose-finding test and the main test.

• On the plates after incubation for 48 hours, test article precipitation was observed at 5000 μg/plate without and with metabolic activation in the dose-finding test. In the main test, test article precipitation was observed at 2500 μg/plate and greater without and with metabolic activation.

• The number of revertant colonies in both the negative and positive controls was within the range (mean ± 3SD) of the background data of SNBL DSR. Accordingly, it was judged that this study was performed satisfactorily.

It was concluded that, under the conditions of this study, PROJECT W did not induce gene

mutation in bacteria.