

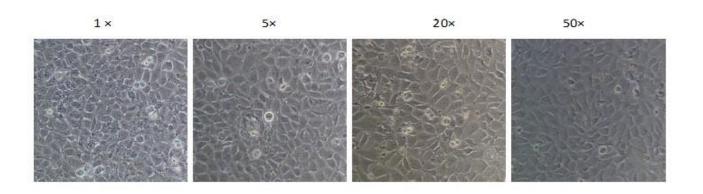
# Neodye DNA Orange Cellular Toxicity Analysis

Catalogue number NB-79-0001

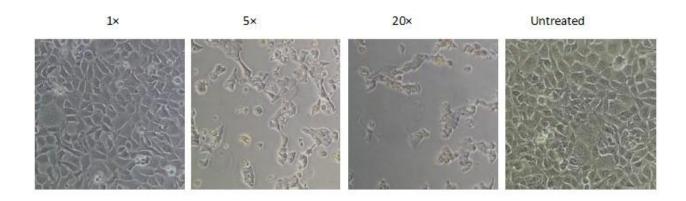
Morphological observation:

## HEK 293 cells (24 hours after treatment):

- NeoDye DNA orange (working Solution):



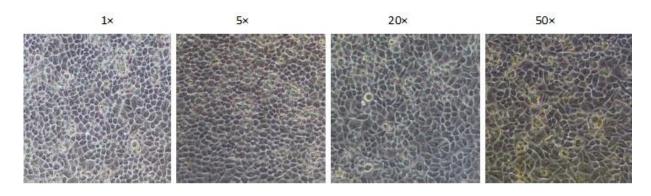
- EB (working Solution):



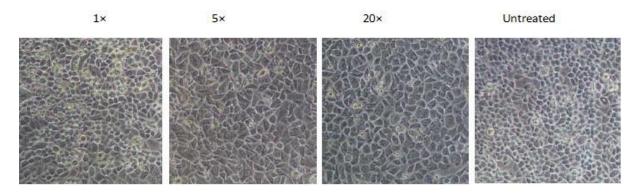


## Hela cells (24 hours after treatment):

- NeoDye DNA orange (working Solution):

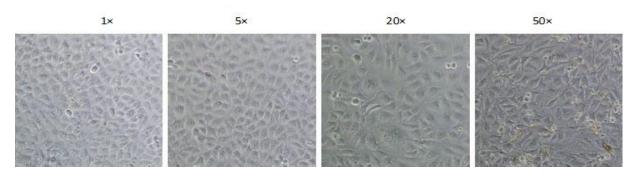


- EB (working solution):



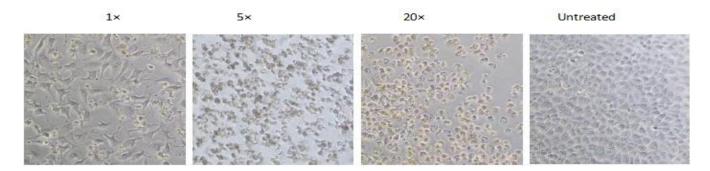
## MCF-7 cells (24 hours after treatment):

- NeoDye DNA orange (working Solution):





- EB (working solution):



Test result:

Table1: Cellular toxicity determination with CCK-8 cell counting kit (24 hours after treatment)

|        | Neo Dye DNA |       |       |       | EB    |       |       | Untreated |
|--------|-------------|-------|-------|-------|-------|-------|-------|-----------|
| Cells  | 1×          | 5×    | 20×   | 50×   | 1×    | 5×    | 20×   |           |
| type   |             |       |       |       |       |       |       |           |
| HEK293 | 1.464       | 1.504 | 1.498 | 1.448 | 1.123 | 0.861 | 0.892 | 1.146     |
| HELA   | 2.493       | 2.401 | 2.435 | 2.389 | 2.192 | 1.567 | 1.184 | 2.626     |
| MCF-7  | 1.996       | 1.45  | 1.572 | 1.698 | 1.097 | 0.803 | 0.855 | 2.09      |

### Conclusion

NeoDye DNA has little toxicity to culture cells and has little effect on cell growth and cell morphology, while EB exhibits severe toxicity to culture cells. HEK293 and MCF-7 cells even almost all died after treated with high doses of EB.