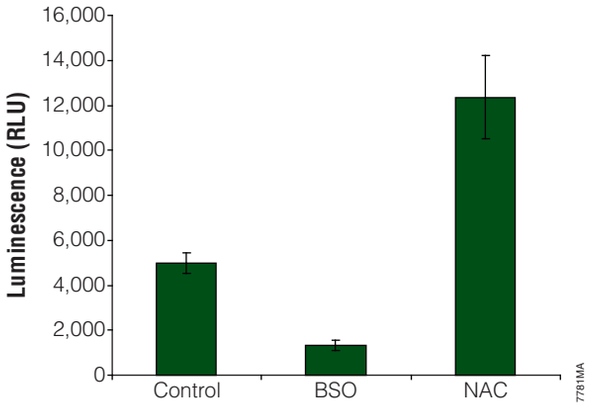


Figure 4. Modulation of intracellular GSH concentration of U937 cells by BSO or NAC. Y-axis: luminescence, X-axis: samples (control: nontreated control, BSO: buthionine sulfoxime-treated cells, NAC: N-acetylcysteine-treated cells).

Summary

We confirmed that the GSH-Glo™ Assay produced linear results in the GSH concentration range (0.5–5 µM) indicated by Promega. We also determined the optimal range of U937 cell numbers for a linear correlation between intracellular GSH concentration and luminescence. Finally, we showed the applicability of the assay system by comparing the luminescence of nontreated cells with the luminescence of cells with an increased (NAC-treated) or reduced (BSO-treated) intracellular GSH content.

The GSH-Glo™ Assay system is an easy-to-use assay to quantify glutathione in our model. The assay could be used as a screening system to assess effects of different compounds on ROS linked with GSH.

References

1. Davenport, D.M. and Wargovich M.J. (2005). *Food Chem. Toxicol.*, **43**, 1753–62.
2. Dröge, W. (2002) *Physiol. Rev.* **82**, 47–95.
3. Kim, H.J. *et al.* (2006) *Oncogene* **25**, 2785–94.

Protocols

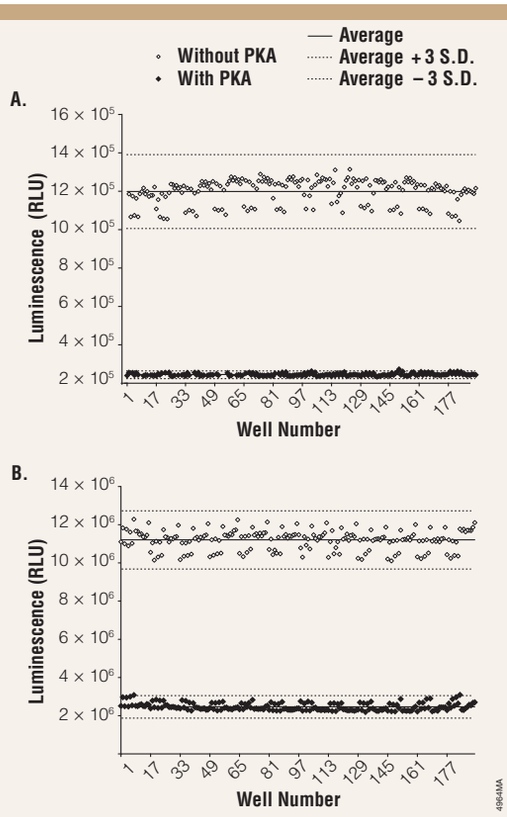
GSH-Glo™ Glutathione Assay Technical Bulletin #TB369 (www.promega.com/tbs/tb369/tb369.html)

Ordering Information

Product	Size	Cat.#
GSH-Glo™ Glutathione Assay	10 ml	V6911
	50 ml	V6912

ERRATUM

The article “Screen for Kinase Modulators in a High-Throughput Format with Promega Kinase Reagents” (pages 21–24 in *Cell Notes* Issue 20) contained an error in the legend for Figure 4. The Z′-factor values in the experiment described were determined for the Kinase-Glo® Max Assay, not the Kinase-Glo® Plus Assay. The figure with corrected legend is presented here.



Determining Z′-factor for Kinase-Glo® Max Assay run in a 384-well plate. **Panel A.** The assay was performed as described in Technical Bulletin #TB372 with 0.2 units/well PKA and 10 µM ATP for five minutes at room temperature (solid symbols) or without PKA (open symbols). **Panel B.** The assay was performed using 0.2 units/well PKA and 100 µM ATP for 30 minutes at room temperature (solid symbols) or without PKA (open symbols). Assays were performed in 384-well plates in a final volume of 20 µl. Solid lines indicate the mean, and the dotted lines indicate ± 3 S.D. Z′-factor values were 0.8 for both 10 µM and 100 µM ATP.