

Reporter gene assays

Luciferase assay in barley: Kumar et al. (2011). Cloning and characterization of barley caryopsis FCA. *Physiologia Plantarum* 143, 93–106 [Read more](#)

Luciferase assay in Jurkat T lymphocytes: Stevens et al. (2010). T-cell receptor early signalling complex activation in response to interferon- α receptor stimulation. *Biochemical Journal* 428, 429–437 [Read More](#)

Dual Luciferase Assay (DLR®): Torrano et al. (2011). ETV6-RUNX1 promotes survival of early B lineage progenitor cells via a dysregulated erythrop

Chemiluminescence

oietin receptor. *Blood* 118 (18), 4910-4918 [Read more](#)

Chemiluminescence: Sorouraddin et al. (2011). Direct chemiluminescence determination of penicillin G potassium and a chemometrical optimization approach. *Luminescence* 26, 622–628 [Read more](#)

Receptor Binding Studies

Thyrotropin receptor binding study using CRE luciferase: Lado-Abeal et al. (2011). A Family with Congenital Hypothyroidism Caused by a Combination of Loss-of-Function Mutations in the Thyrotropin Receptor and Adenylate Cyclase-Stimulating G Alpha-Protein Subunit Genes. *Thyroid* 21 (2), 103-109 [Read more](#)

Reactive Oxygen Species (ROS)

Measurement of free oxygen radicals in scar tissue: Soybir et al. (2012). Delayed cutaneous wound healing in aged rats compared to younger ones. *International Wound Journal* in press [Read more](#)

ROS: Karadeniz Cerit et al. (2012). The antifibrotic drug halofuginone reduces ischemia/reperfusion-induced oxidative renal damage in rats. *Journal of Pediatric Urology* In press [Read more](#)

Water and Soil Toxicity

Luciferase biosensors for heavy metals: Amaro et al. (2011). Whole-cell biosensors for detection of heavy metal ions in environmental samples based on metallothionein promoters from *Tetrahymena thermophila*. *Microbial Biotechnology* 4, 513–522 [Read more](#)

Field Testing of Groundwater: Siegfried et al. (2012)

Field Testing of Arsenic in Groundwater Samples of Bangladesh Using a Test Kit Based on Lyophilized Bioreporter Bacteria. *Environmental Science & Technology* 46 (6), 3281-3287 [Read more](#)

ATP Determination

ATP in mammalian cancer cells: Agbor et al. (2011). Small Ubiquitin-related Modifier (SUMO)-1 Promotes Glycolysis in Hypoxia. *Journal of Biological Chemistry* 286, 4718-4726 [Read more](#)

Further Applications

Monitoring of luminescent bacteria - Enzyme activity - LIA (luminescent immuno assay) - hygiene monitoring
- Cell viability - DNA probe assay