Center for Skeletal Research

Glosensor cAMP

Method:	Glosensor Luminescence Assay
Vendor:	Glosensor plasmid p22F from Promega; Luciferin from Biotium Inc.
Description:	This service will enable real-time measurement of intracellular cAMP accumulation in live cells via the glosensor, luciferase-based reporter system. Cells must be transfected with the glosensor plasmid (p22F). Kinetic on- and off rates of cAMP signaling can be determined over extended time periods (up to 8 hours), and single time-point dose response analyses can also be derived from peak response times. Users may transfect their own cells with glosensor, and provide the cells to the Core for drug treatment and measurement. Or they may use a Core-provided cell line that stably expresses the glosensor reporter (e.g., derived from HEK-293, SaOS-2 or UMR-106 cells). Assays are performed with assistance of a Core technician in 96 well white plates, and utilize the Core's Perkin Elmer Envision plate reader for data acquisition. Costs are based on use of luciferin and assay reagents provided by the Core.

Sample and Performance Characteristics

Plate type:	White, Flat-Bottom 96-well plates, cells must be intact and alive, submission by special arrangement
Minimum Volume:	Cells should be confluent in 100ul Culture Medium.
Notes:	Contact Core to arrange sample submission and assay.

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