

Glucocorticoid Receptor Transactivation Assay

Références/ References

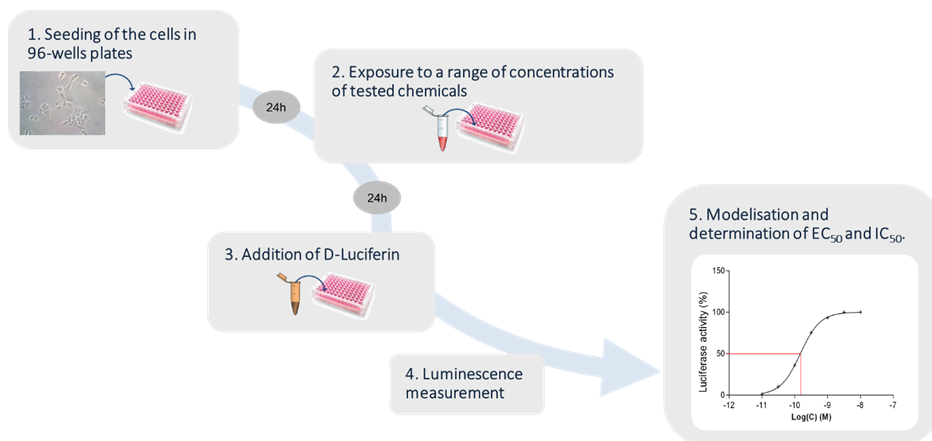
- A consolidated method for screening the endocrine activity of drinking water
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Food Chemistry 213 (2016) 274–283
- Functional profiling of bisphenols for nuclear receptors
Marina Grimaldi, Abdelhay Boulahtouf, Lucia Toporova, Patrick Balaguer
Toxicology 420 (2019) 39–45
- High Content Screening Using New U2OS Reporter Cell Models Identifies Harmol Hydrochloride as a Selective and Competitive Antagonist of the Androgen Receptor
Hadjer Dellal, Abdelhay Boulahtouf, Elina Alaterre, Alice Cuenant, Marina Grimaldi, William Bourguet, Céline Gongora, Patrick Balaguer and Philippe Pourquier
Cells 2020, 9, 1469; doi:10.3390/cells9061469
- Assessing species-specific differences for nuclear receptor activation for environmental water extracts
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Water Research 185 (2020) 116247

Résumé de la méthode/ Summary of the method

Transactivation d'un récepteur nucléaire, utilisant une ligne cellulaire humaine stablement transfectée (nécessitant la signature d'un Material Transfert Agreement)

Nuclear receptor transactivation using a stably transfected human cell line (available via an Material Transfert Agreement)

Readout : luminescence



Equipement nécessaire/ Necessary equipment

culture cellulaire:

- Equipment standard de culture cellulaire (e.g. incubateur, hotte flux laminaire) / *standard cell culture equipment (e.g. incubator, laminar flow hood)*
- 96-wells white opaque culture plates (e.g. Greiner bio-one 655083-905, CellStar; Dutscher, Brumath, France)
- Cell cytotoxicity measurement (e.g. Alamar blue, or Neutral red).

Culture medium	<ul style="list-style-type: none"> - DMEM/F-12 with phenol red (Gibco 31331-028) - 10% FBS (Eurobio CVFSVF00) - 1% v/v penicillin/streptomycin (Gibco 15070-63) - 0.5 µg/mL puromycin (Sigma P8833) - 1 mg/mL geneticin (Invivogen ant-gn)
Test medium	<ul style="list-style-type: none"> - DMEM/F-12 without phenol red (Gibco 21041-025) - 5% DCC-treated FBS - 1% v/v penicillin/streptomycin (Gibco 15070-63)
Luminescence medium	<ul style="list-style-type: none"> - DMEM/F-12 without phenol red (Gibco 21041-025) - 5% DCC-treated FBS - 1% v/v penicillin/streptomycin (Gibco 15070-63) - 0.3 mM D-luciferin (Perkin Elmer 122799)

Luminomètre / Luminometer

Exemple : MicroBeta Wallac luminometer (Perkin-Elmer). Lecture de microplaques, par le dessus.

La lecture est optimale 20 minutes après l'addition du milieu de luminescence.

Reading is optimal 20 minutes after the addition of the luminescence medium.