Effects of low or high concentrations of monothioglycerol on human embryonic stem cell derived EBs - Study GBCO3668

Genomics Study Specifications

**Study Name**  
Effects of low or high concentrations of monothioglycerol on human embryonic stem cell derived EBs

**Contact Name**  
Teresa Ku (Beckman Research Institute of the City of Hope)

**Publication**  
Not provided

**My Strategies**  
Return to My Strategies page

**Classification**  
Cell differentiation

**Links**

- Biomaterials Graph
- ArrayExpress

**BCBC Release Date**  
August 11, 2009

**Public Release Date**  
July 29, 2011

**Citation**  
available

**Synopsis**

Prior studies indicated that high concentrations of monothioglycerol (MTG), a thio-containing compound, is necessary to promote the survival or differentiation of insulin 1 expressing cells from murine ES-derived embryonic bodies (EBs). In this experiment, we tested the hypothesis that human ES cell-derived EBs, when cultured in the presence of high concentrations of MTG could preferentially differentiate to definitive endoderm, compared to those cultured in the presence of low concentrations of MTG. In addition, we wish to establish that the EBs cultured from the high MTG group is effectively committed to all 3 germ layers, compared to the undifferentiated ES cells. Thus, 3 groups of samples were submitted for micro-array analyses. Each group has 4 biological replicates.

**Platform types**  
Expression microarray, Expression

**Platforms**

- Show platform Agilent Whole Human Genome Microarray 4x44K (G4112F)

**Study Design Type**

- compound_treatment_design
- development_or_differentiation_design

**Study Factors**

- Show study factors

**Study Assays**

- Show study assays

**Access Status**

This resource is publicly viewable.

**Request this Resource**

- Request from a repository

Primary contributor: Ku Lab

**Resource Tags**

- Read more about tags

**Resource History & Actions**

- Approved on Aug 11, 2009
- Last modified on Aug 02, 2011

**Related resources**

*BCBC*

No matching resources

*Other Consortia*

No matching resources

Data courtesy of dkCOIN. Only public resources are displayed.

**Access to Study Data**

This Study Data is publicly available to all users.

**Gene List(s)**

Use the following form(s) to refine the parameters and add the gene list to a strategy:

- High MTG treated versus undifferentiated HESC
Genome Browser
There are no genome browser tracks currently available for this study.

Lists of Locations
There are no genomic location datasets currently available for this study.

Repositories
Ku Lab

Stock #: Not provided
Availability Notes: Not provided

Comments
There are no comments for this entry.