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

**Genomics Study Specifications**

<b>Study Name</b>	Effects of low or high concentrations of monothioglycerol on human embryonic stem cell derived EBs
<b>Contact Name</b>	<a href="#">Teresa Ku</a> (Beckman Research Institute of the City of Hope)
<b>Publication</b>	Not provided
<b>My Strategies</b>	<a href="#">Return to My Strategies page</a>
<b>Classification</b>	Cell differentiation
<b>Links</b>	 <a href="#">Biomaterials Graph</a>  <a href="#">ArrayExpress</a>
<b>BCBC Release Date</b>	August 11, 2009
<b>Public Release Date</b>	July 29, 2011
<b>Citation</b>	<i>unavailable</i>

**Synopsis**

<b>Study Description</b>	Goals	
Approaches	Results	Conclusions
Related Studies		

Prior studies indicated that high concentrations of monothioglycerol (MTG), a thio-containing compound, is necessary to promote the survival and 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.

<b>Platform types</b>	Expression microarray, Expression
<b>Platforms</b>	<a href="#">Show platform Agilent Whole Human Genome Microarray 4x44K [G4112F]</a>
<b>Study Design Type</b>	<ul style="list-style-type: none"> <li>compound_treatment_design</li> <li>development_or_differentiation_design</li> </ul>
<b>Study Factors</b>	<a href="#">Show study factors</a>
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**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](#)

**Access Status**

 This resource is publicly viewable.

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Primary contributor: [Ku Lab](#)

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**Resource History & Actions**

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

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**Other Consortia**

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Data courtesy of [dkCOIN](#). Only public resources are displayed.

|Fold Change| Greater Than:

Confidence Level: High Confidence  All Results

*For a microarray experiment a result with high confidence has a confidence level of at least 80%.*

*For a ChIP-chip experiment a result with high confidence has a confidence level of at least 90% and all fold changes are positive.*

Reference (Denominator): undiff HESC

[Find Genes](#)

▶ [Low MTG treated versus undifferentiated HESC](#)

▶ [High versus Low MTG treated 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**

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**Stock #:** *Not provided*  
**Availability Notes:** *Not provided*

### Comments

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