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## Gene expression profiling of hESC derived eGFP-SOX17+ endoderm cells - Study GBCO4216

### Genomics Study Specifications

<b>Study Name</b>	Gene expression profiling of hESC derived eGFP-SOX17+ endoderm cells
<b>Contact Name</b>	Seung Kim (Stanford University)
<b>Publication</b>	<a href="http://www.ncbi.nlm.nih.gov/pubmed/21362573">http://www.ncbi.nlm.nih.gov/pubmed/21362573</a>
<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>	July 29, 2011
<b>Public Release Date</b>	July 29, 2011
<b>Citation</b>	Wang P, Rodriguez RT, Wang J, Ghodasara A, Kim SK. <a href="#">Targeting SOX17 in human embryonic stem cells creates unique strategies for isolating and analyzing developing endoderm</a> . Cell Stem Cell. 2011. 8:335-46

**Synopsis****Study Description**

## Goals

## Approaches

## Results

## Conclusions

## Related Studies

Using homologous recombination in human ESC, we inserted an enhanced green fluorescent protein (eGFP) transgene into a locus encoding a postulated marker of human endoderm, SOX17 in H9 human embryonic stem cells. This allowed purification of SOX17+ hESC endodermal progeny by fluorescence activated cell sorting (FACS) to generate microarray gene expression profile. Using Wnt3 and Activin to differentiate hSOX17-2 to stage 1 cells, and subsequently FGF10 and cyclopamine to stage 2 cells, we isolated eGFP+ cells by FACS at each stage, performed microarray analysis.

<b>Platform types</b>	Expression, Expression microarray
<b>Platforms</b>	<a href="#">Show platform Affymetrix HG-U133_Plus_2</a>
<b>Study Design Type</b>	<ul style="list-style-type: none"> <li>cell_type_comparison_design</li> <li>development_or_differentiation_design</li> <li>is_expressed_design</li> </ul>
<b>Study Factors</b>	<a href="#">Show study factors</a>
<b>Study Assays</b>	<a href="#">Show study assays</a>

### Access to Study Data


This Study Data is publicly available to all users.

### Gene List(s)


Browse related gene lists by clicking on the link(s) below:

[Cell Surface Markers: hSOX17-2 Endoderm v](#) Browse Cell Surface Markers differentially expressed between hSOX17-2 derived endoderm cells and undifferentiated H9 ES cells

### Access Status

 This resource is publicly viewable.

### Request this Resource

 Request from a repository

Primary contributor: [Kim Lab](#)

### Resource Tags


Affymetrix Human Genome U133 Plus 2.0, CD141, CD238, CD49e, ITGA5, KEL, SOX17, THBD

 Login to edit tags

 [Read more about tags](#)

### Resource History & Actions

Approved on Jul 29, 2011  
Last modified on Jan 17, 2012

 Login to edit or request an edit

### Related resources

**BCBC**

No matching resources

**Other Consortia**

No matching resources

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

[H9](#)

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

**hSOX17-2 Stage 1 derived endoderm cells versus H9 hESC cells**

|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): H9 hESC

**hSOX17-2 Stage 2 derived endoderm cells versus H9 hESC cells**

**hSOX17-2 Stage 2 versus Stage 1 derived endoderm cells**

### 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

Kim Lab

 Request this resource

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

### Comments

There are no comments for this entry.

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