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Expression profiles of novel pancreatic cell lines. - Study GBCO1150**Genomics Study Specifications**

Study Name	Expression profiles of novel pancreatic cell lines.
Contact Name	Mark Magnuson (Vanderbilt University)
Publication	Not provided
My Strategies	Return to My Strategies page
Classification	Cell differentiation; Differentiation of insulin-producing cells
Links	 Biomaterials Graph  ArrayExpress
BCBC Release Date	April 28, 2004
Public Release Date	April 28, 2004
Citation	<i>unavailable</i>

Synopsis

Study Description	Goals	
Approaches	Results	Conclusions
Related Studies		


We studied the expression profiles of two different cell lines that were generated in our laboratory from tumors found in mice expressing the SV40 T antigen under the control of the upstream glucokinase promoter. The first cell line, called GKP2 cells, was derived from an insulinoma and expresses insulin and pdx1 along with other markers of beta cells. The second cell line, named GKP4 cells, was derived from periductal tumors that did not express insulin or pdx1 but expressed genes of the endocrine lineage, such as Isl1 and Nkx2.2. Interestingly, a small fraction of the GKP4 cells can spontaneously turn on the expression of insulin and pdx1, indicating that they could be islet cell progenitors. The aim of our project was to identify the genes expressed specifically in GKP4 cells. To do so, we compared the gene expression profiles of GKP4 cells with GKP2 cells using DNA microarray.

Platform types	Expression, Expression microarray
Platforms	<p>Show platform Affymetrix MG_U74A</p> <p>Show platform VMSR NIA20K</p> <p>Show platform VMSR NIA10K</p> <p>Show platform VMSR NIA5K</p>
Study Design Type	<ul style="list-style-type: none"> cell_type_comparison_design
Study Factors	Show study factors
Study Assays	Show study assays


Access to Study Data

This Study Data is publicly available to all users.

Gene List(s)**Access Status**

 This resource is publicly viewable.

Request this Resource

 Request from a repository

Primary contributor: [BCBC Mouse / ES](#)

[Cell Core](#)

Co-contributed by:

- [Stoeckert Lab](#)

Resource Tags

Ins1


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Resource History & Actions

Approved on Apr 28, 2004

Last modified on Aug 02, 2011

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Related resources**BCBC**

No matching resources

Other Consortia

No matching resources

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

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

▼ **Mouse GKP2 (insulin and pdx1 expressing) versus GKP4 (isf1 and nkx2.2 expressing) 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): GKP4 Mas5

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


Magnuson Lab

 Request this resource

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

Comments

There are no comments for this entry.

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