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Affymetrix MOE430v2 vs Mouse PancChip 5.0 comparison - Study GBCO1390

Genomics Study Specifications

Study Name	Affymetrix MOE430v2 vs Mouse PancChip 5.0 comparison
Contact Name	Klaus Kaestner (University of Pennsylvania)
Publication	Not provided
My Strategies	Return to My Strategies page
Classification	Tissue expression, surveys and comparisons
Links	Biomaterials Graph ArrayExpress
BCBC Release Date	October 07, 2004
Public Release Date	October 07, 2004
Citation	*unavailable*
Synopsis	Study Description | Goals | Approaches | Results | Conclusions | Related Studies Comparison of two microarray platforms: the Mouse PancChip 5.0 and the Affymetrix GeneChip Mouse Genome 430 2.0 Array. The aim of this experiment was to determine the ability to identify differentially expressed genes in islet and pancreas RNA, and the sensitivity of the two platforms, using the same source material in a carefully controlled manner. RNA was extracted from adult mouse pancreas (n=5) and highly purified islet samples (n = 5). All samples were amplified once. 5 biological replicates (islets vs. pancreas) in a dye swap experimental design were hybridized to the PancChip. 3 biological replicates, using the same amplified RNA hybridized to the PancChip, of both the pancreas and islet samples were also hybridized to the GeneChip. All data were normalized using appropriate methods and differential expression between islet and pancreas was determined using PaGE with a 10% FDR. The study revealed that the PancChip is a highly cost effective alternative to the Affymetrix 430-2, that the PancChip is up to 60% more sensitive than the Affymetrix 430-2 GeneChip and that 80% (7,000) of the probe sets on the PancChip show expression in either Islets or Pancreas, while only 25% (6,800) show expression on the Affymetrix GeneChip.
Platform types	Expression, Expression microarray
Platforms	Show platform Mouse PancChip Show platform Affymetrix Mouse430_2
Study Design Type	• dye_swap_design • hardware_variation_design • organism_part_comparison_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: **Kaestner Lab**
Co-contributed by:
- Stoeckert Lab

Resource Tags

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Resource History & Actions

Approved on Oct 07, 2004
Last modified on Aug 02, 2011

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.

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:

Pancreas versus Islet - Adult Male Mouse

|Fold Change| Greater Than: 1.5

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): islet

Find Genes

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

Kaestner Lab

Request this resource

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

Comments

There are no comments for this entry.

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