Select whether you want to see the HTML rendition of the record or download the record as a SOFT-formatted file

Scope: Self ▼ Format: HTML ▼ Amount: Quick ▼ GEO accession: GSE109035 GO

Series GSE109035

Query DataSets for GSE109035

Status	Public on Jan 11, 2018
Title	Proximity of oligodendrocytes remodels astrocytes' transcriptome
Organism	Mus musculus
Experiment type	Expression profiling by array
Summary	We and other groups doumented that astrocytes modulate migration, maturation and myelin sythesis of oligodendrocytes through release of neurotransmitters, cytokins and other signaling molecules. However, much less is known about on how the oligodendrocytes affects the astrocytes. We compared the transcriptome of cortical astrocytes when cultured alone and co-cultured with non-touching immortalized precursor oligodendrocytes (Oli-neu) in insert systems. Experimental data indicate that the oligodendrocyte-conditioning medium has a substantial effect on the the gene expression in astrocytes. Moreover, oligodendendrocyte proximity remodels major astrocyte functional pathways.
Overall design	we have used the multiple yellow design in which distinctly labeled samples of biological replicates are cohybridized with the microarray, the similarly labeled distinct conditions were compared and the results averaged for both channels. Thus each raw data file contains raw data for two samples (e.g. C1-2_US83300186_252665513680_S01_GE2_1105_Oct12_1_4.txt contains raw data for both C1 and C2 samples) and dye assignment is indicated in the label field in the corresponding sample records.
Contributor(s)	Iacobas DA, Iacobas S
Citation missing	*Has this study been published? Please login to update or notify GEO.*
Submission date	Jan 10, 2018
Last update date	Jan 24, 2018
Contact name	Dumitru Andrei Iacobas
E-mail	daiacobas@pvamu.edu
Phone	936-261-9926
Organization name	Prairie View A&M University
Department	Electrical and Computer Engineering
Lab	Center for Computational Systems Biology
Street address	Ann Preston St
City	Prairie View
State/province	TX
ZIP/Postal code	77446
Country	USA
Platforms (1)	GPL10333 Agilent-026655 Whole Mouse Genome Microarray 4x44K v2 (Feature Number version)
Samples (8)	GSM2928368 cortical astrocytes cultured alone_C1

More...