

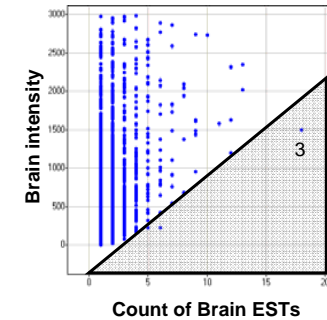
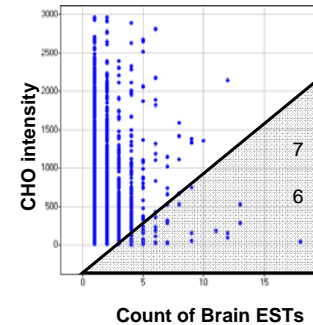
# CHO Affymetrix Microarray

## Microarray Design, Quality Assessment and Comparative Transcriptome Profiling

RNA Source (*Technical replicate)	% Probe Sets p-value >0.04 'Absent'	% Probe Sets p-value <0.04 'Present'
rDXB-11 (0 hr culture)	18.6	81.4
rDXB-11 (12 hr culture)	19.3	80.7
rDXB-11 (24 hr culture)	18.7	81.3
DXB-11	18.5	81.5
DG44	18.1	82.0
Chinese Hamster Ovary 1 *	11.5	88.5
Chinese Hamster Ovary 2 *	12.1	87.9
Chinese Hamster Brain	10.2	89.8
Chinese Hamster Spleen	18.2	82.0
Chinese Hamster Liver	25.6	74.4

### CHO Microarray Design Details

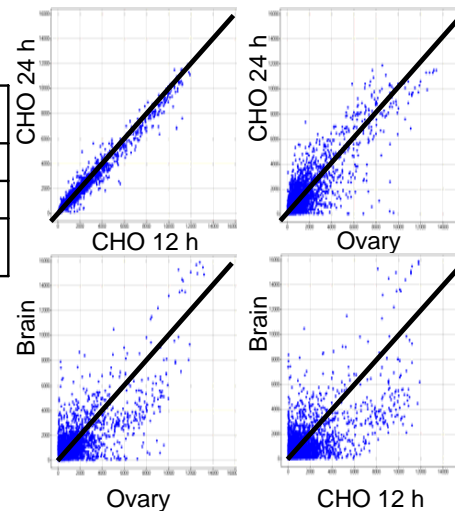
- 9,924 unique CHO sequences
  - Contigs: 6422 Singlets: 3622
- 92.3% of probes are specific for their target
- 97.5% of probes were capable of detecting a signal in at least one of the ten test hybridizations



Combined	All Present	All Absent	Mixed	% All Present	% All Absent	% Mixed
CHO Cells	7690	1320	1107	76.0	13.0	10.9
Tissues	7008	409	2700	69.3	4.0	26.7
All Samples	6555	249	3313	64.8	2.5	32.7

### Comparative Hybridization of Cell Lines and Tissues

- Ten test hybridizations were performed using RNA from CHO cells and Chinese hamster tissues
- More than 81% of the probes on the microarray detected a signal in each CHO cell line RNA sample
- Only 10.9% of probes did not detect a signal for any of the CHO cell RNA samples



### Hybridization Results

- There is agreement in EST isolation frequency and microarray intensities
  - The plots above compare brain EST sequencing results with cell line and brain microarray intensities
- Comparative plots of intensities for cell lines and tissues
  - CHO cell RNA is more similar to ovary RNA than brain RNA