

PCA plot showing the first two principal components (PC1 and PC2) of gene expression data. The x-axis is PC1 (ranging from -5 to 5) and the y-axis is PC2 (ranging from -5 to 5). Genes are labeled with their names and sample IDs. The plot shows three distinct clusters of genes, corresponding to the three conditions: control (blue), 100 ng/ml (red), and 250 ng/ml (green). The control genes are clustered on the right (positive PC1), while the treatment genes are clustered on the left (negative PC1).

Gene	Sample ID	Condition	PC1 (approx.)	PC2 (approx.)
GABA _A Rs	1_7	Control	-4.5	4.5
GABA _A Rs	1_7	100 ng/ml	-4.5	4.5
GABA _A Rs	1_7	250 ng/ml	-4.5	4.5
GepGAT	1_2	Control	-4.5	4.5
GepGAT	1_2	100 ng/ml	-4.5	4.5
GepGAT	1_2	250 ng/ml	-4.5	4.5
vGAT	1_1	Control	-4.5	4.5
vGAT	1_1	100 ng/ml	-4.5	4.5
vGAT	1_1	250 ng/ml	-4.5	4.5
NR2B	3	Control	-4.5	4.5
NR2B	3	100 ng/ml	-4.5	4.5
NR2B	3	250 ng/ml	-4.5	4.5
YFP	1	Control	-4.5	4.5
YFP	1	100 ng/ml	-4.5	4.5
YFP	1	250 ng/ml	-4.5	4.5
Arc	5	Control	-4.5	4.5
Arc	5	100 ng/ml	-4.5	4.5
Arc	5	250 ng/ml	-4.5	4.5
GAD2	3	Control	-4.5	4.5
GAD2	3	100 ng/ml	-4.5	4.5
GAD2	3	250 ng/ml	-4.5	4.5
Calbindin	7	Control	-4.5	4.5
Calbindin	7	100 ng/ml	-4.5	4.5
Calbindin	7	250 ng/ml	-4.5	4.5
Synaptopodin	6	Control	-4.5	4.5
Synaptopodin	6	100 ng/ml	-4.5	4.5
Synaptopodin	6	250 ng/ml	-4.5	4.5
vGluT2	2	Control	-4.5	4.5
vGluT2	2	100 ng/ml	-4.5	4.5
vGluT2	2	250 ng/ml	-4.5	4.5
vGAT	4	Control	-4.5	4.5
vGAT	4	100 ng/ml	-4.5	4.5
vGAT	4	250 ng/ml	-4.5	4.5
DAPI	8	Control	-4.5	4.5
DAPI	8	100 ng/ml	-4.5	4.5
DAPI	8	250 ng/ml	-4.5	4.5
DAPI	4	Control	-4.5	4.5
DAPI	4	100 ng/ml	-4.5	4.5
DAPI	4	250 ng/ml	-4.5	4.5
GFP	4	Control	-4.5	4.5
GFP	4	100 ng/ml	-4.5	4.5
GFP	4	250 ng/ml	-4.5	4.5
GluR4	8	Control	-4.5	4.5
GluR4	8	100 ng/ml	-4.5	4.5
GluR4	8	250 ng/ml	-4.5	4.5
GluR2	8	Control	-4.5	4.5
GluR2	8	100 ng/ml	-4.5	4.5
GluR2	8	250 ng/ml	-4.5	4.5
vGluT1	3	Control	-4.5	4.5
vGluT1	3	100 ng/ml	-4.5	4.5
vGluT1	3	250 ng/ml	-4.5	4.5
PSD95	1	Control	-4.5	4.5
PSD95	1	100 ng/ml	-4.5	4.5
PSD95	1	250 ng/ml	-4.5	4.5
Synapsin1	2	Control	-4.5	4.5
Synapsin1	2	100 ng/ml	-4.5	4.5
Synapsin1	2	250 ng/ml	-4.5	4.5

PCA plot showing the first two principal components (PC1 and PC2) of gene expression data. The x-axis represents PC1 (ranging from -8 to 6) and the y-axis represents PC2 (ranging from -2 to 3). Genes are colored by cluster: green (top-left), blue (top-right), red (bottom-right), and dark red (bottom-left).

Gene	PC1 (approx.)	PC2 (approx.)	Cluster
Synapo_F0	-0.5	3.5	Green
VACht_F0	1.5	3.2	Blue
DAR1_F0	1.5	1.9	Blue
5HT1A_F0	1.2	1.2	Blue
NOS_F0	0.5	0.8	Green
nr2b_F0	-1.2	0.7	Green
nmdar1_F0	-1.5	0.6	Green
glur2_F0	-2.5	0.3	Green
VGlut2_F0	-1.0	0.4	Green
tubuli_F0	1.5	0.3	Blue
TH_F0	1.2	0.1	Blue
Vglut3_F0	1.5	0.0	Blue
psd_F0	-4.0	-0.2	Green
GABABR_F0	-3.0	-0.4	Dark Red
VGlut1t2_F0	-4.5	-0.6	Green
VGlut1t1_F0	-4.5	-0.7	Green
Synap1_F0	-4.0	-1.5	Green
Synap2_F0	-2.5	-2.1	Green
GABAR1_F0	0.5	-1.3	Red
PV_F0	3.0	-1.4	Red
Gephyr_F0	3.0	-1.9	Red
gad_F0	4.5	-2.5	Red
VGAT_F0	4.2	-2.6	Red