

Table S5. Selected top functional subcategories of 'Canonical Pathways' that are significantly enriched with human homologs of zebrafish genes deregulated by 500 µg/L, 1500 µg/L and 4500 µg/L of BPA. The data was generated using Ingenuity Pathway Analysis™ software and only subcategories with $P < 0.05$ (Fisher's Exact Test) and having at least 4% of homologs enriched in two treatment groups are listed.

| Functional Subcategories | Percentage (no. molecules enriched / no. molecules used in analysis) | Molecules (human homologs of zebrafish genes) used in the analysis |
|---|---|---|
| <u>Tight Junction Signaling</u> | | |
| BPA_500µg | 7.9% (8/101) | MYLK, TJP2, CLDN4, RHOA, MYL4, MYH11, ACTG1, ACTA1 |
| BPA_1500µg | 3% (5/168) | AKT1, CLDN4, PPP2R2A, ACTG1, ACTA1 |
| BPA_4500µg | 4.8% (6/125) | MYH6, JAM3, TGFB2, MYL4, MYH11, ACTG1 |
| <u>Actin Cytoskeleton Signaling</u> | | |
| BPA_500µg | 8.9% (9/101) | MYLK, TIAM2, PIK3CG, RHOA, FGF8, MYL4, MYH11, ACTG1, ACTA1 |
| BPA_1500µg | 5.4% (9/168) | PTK2, ROCK1, TIAM2, PIK3CG, FGF8, HRAS, ACTG1, ACTA1, FGF13 |
| BPA_4500µg | 7.2% (9/125) | PTK2, ROCK1, MYH6, DIAPH3, MYL4, HRAS, MYH11, PIK3R2, ACTG1 |
| <u>Integrin Signaling</u> | | |
| BPA_500µg | 7.9% (8/101) | MYLK, TSPAN3, RND3, ASAP1, PIK3CG, RHOA, ACTG1, ACTA1 |
| BPA_1500µg | 5.4% (9/168) | PTK2, ROCK1, AKT1, RND3, PIK3CG, TSPAN2, HRAS, ACTG1, ACTA1 |
| BPA_4500µg | 7.2% (9/125) | PTK2, ROCK1, TSPAN3, RND3, HRAS, CAPN2, PIK3R2, ACTG1, ITGB5 |
| <u>B Cell Receptor Signaling</u> | | |
| BPA_500µg | 5.9% (6/101) | BLNK, CAMK2D, GAB1, PIK3CG, SYK, PPP3CA |
| BPA_1500µg | 4.8% (8/168) | BLNK, AKT1, CAMK2D, GAB1, PIK3CG, SYK, HRAS, PPP3CA |
| BPA_4500µg | 4.8% (6/125) | BLNK, CAMK2D, HRAS, PIK3R2, PPP3CA, CALM1 |
| <u>NRF2-mediated Oxidative Stress Response</u> | | |
| BPA_500µg | 5% (5/101) | PIK3CG, DNAJB9, ACTG1, ACTA1, DNAJC11 |
| BPA_1500µg | 6% (10/168) | AKT1, PIK3CG, CREBBP, DNAJC3, HRAS, DNAJC10, DNAJB9, ACTG1, DNAJB5, ACTA1 |
| BPA_4500µg | 4.8% (6/125) | DNAJC18, HRAS, DNAJC10, PIK3R2, ACTG1, DNAJB5 |
| <u>Ephrin Receptor Signaling</u> | | |
| BPA_500µg | 4% (4/101) | SDCBP, AXIN1, PIK3CG, RHOA |
| BPA_1500µg | 5.4% (9/168) | PTK2, ROCK1, GRIN1, GNB4, AKT1, AXIN1, PIK3CG, EFNB1, HRAS |

BPA_4500µg 6.4% (8/125) PTK2, ROCK1, GNB4, SDCBP, AXIN1, EFNB1, HRAS, EPHA3

Axonal Guidance Signaling

BPA_500µg 6.9% (7/101) WNT8A, SDCBP, BDNF, PIK3CG, RHOA, MYL4, PPP3CA

BPA_1500µg 6.5% (11/168) PTK2, ROCK1, GNB4, AKT1, BDNF, PIK3CG, EFNB1, RTN4, HRAS, SLIT2, PPP3CA

BPA_4500µg 10.4% (13/125) HRAS, SLIT2, EPHA3, PTK2, ROCK1, GNB4, MICAL1, SDCBP, EFNB1, RTN4, MYL4, PIK3R2, PPP3CA

VEGF Signaling

BPA_500µg 3% (3/101) PIK3CG, ACTG1, ACTA1

BPA_1500µg 4.2% (7/168) PTK2, ROCK1, AKT1, PIK3CG, HRAS, ACTG1, ACTA1

BPA_4500µg 4% (5/125) PTK2, ROCK1, HRAS, PIK3R2, ACTG1

Clathrin-mediated Endocytosis

BPA_500µg 5.9% (6/101) CD2AP, PIK3CG, FGF8, ACTG1, ACTA1, PPP3CA

BPA_1500µg 4.2% (7/168) HSPA8, PIK3CG, FGF8, ACTG1, ACTA1, PPP3CA, FGF13

BPA_4500µg 3.2% (4/125) PIK3R2, ACTG1, ITGB5, PPP3CA

Synaptic Long Term Potentiation

BPA_500µg 2% (2/101) CAMK2D, PPP3CA

BPA_1500µg 4% (6/168) GRIN1, CAMK2D, PPP1R3C, CREBBP, HRAS, PPP3CA

BPA_4500µg 4% (5/125) CAMK2D, PPP1R3C, HRAS, PPP3CA, CALM1

Glycolysis/Gluconeogenesis

BPA_500µg 3% (3/101) ADH6, HK1, PGM1

BPA_1500µg 4% (6/168) ADH6, C10ORF134, ENO3, ALDOA, LDHB, PFKM

BPA_4500µg 4% (5/125) ADH6, C10ORF134, ENO3, PGM1, LDHB
