Table S7: Functional Annotation TNT 0.12 mg/L

Biological Functions	p-Value
Molecular Transport	3.90E-04
Protein Trafficking	3.90E-04
Infectious Disease	6.70E-04
Infectious Disease	9.83E-04
Ophthalmic Disease	1.38E-03
Carbohydrate Metabolism	1.38E-03
Developmental Disorder	1.38E-03
Hereditary Disorder	1.38E-03
Metabolic Disease	1.38E-03
Embryonic Development	1.38E-03
Organismal Development	1.38E-03
Tissue Development	1.38E-03
Cardiovascular Disease	1.38E-03
Hereditary Disorder	1.38E-03
Cardiovascular Disease	1.38E-03
Cellular Assembly and Organization	1.38E-03
Developmental Disorder	1.38E-03
Hereditary Disorder	1.38E-03
Metabolic Disease	1.38E-03
Neurological Disease	1.38E-03
Lipid Metabolism	1.38E-03
Small Molecule Biochemistry	1.38E-03
Developmental Disorder	1.38E-03
Hereditary Disorder	1.38E-03
Metabolic Disease	1.38E-03
Renal and Urological Disease	1.38E-03
Lipid Metabolism	1.38E-03
Small Molecule Biochemistry	1.38E-03
Cell Morphology	1.38E-03
Developmental Disorder	1.38E-03
Hematological Disease	1.38E-03
Hereditary Disorder	1.38E-03
Skeletal and Muscular System Devel	1.38E-03
Tissue Morphology	1.38E-03
Connective Tissue Disorders	1.38E-03
Developmental Disorder	1.38E-03
Hereditary Disorder	1.38E-03
Neurological Disease	1.38E-03
Skeletal and Muscular Disorders	1.38E-03
Drug Metabolism	1.44E-03
Protein Synthesis	1.44E-03
Molecular Transport	2.75E-03
Small Molecule Biochemistry	2.75E-03
Nucleic Acid Metabolism	2.75E-03
Carbohydrate Metabolism	2.75E-03
Carbohydrate Metabolism	2.75E-03

Toxicological Functions	p-value
Renal Inflammation	4.12E-03
Renal Nephritis	4.12E-03
Cardiac Necrosis/Cell Death	4.58E-02

Toxicological Lists	p-value
Renal Inorganic Phosphate	0.0083
Nongenotoxic Hepatocarcin	0.0302
Mitochondrial Dysfunction	0.1738
Aryl Hydrocarbon Receptor	0.1963
PPARα/RXRα Activation	0.2198
Cardiac Necrosis/Cell Death	0.2698
NRF2-mediated Oxidative S	0.2754
Xenobiotic Metabolism Sign	0.3837

Developmental Disorder	2.75E-03
Hematological Disease	2.75E-03
Hereditary Disorder	2.75E-03
Tissue Development	2.75E-03
Cellular Assembly and Organization	2.75E-03
Lipid Metabolism	2.75E-03
Small Molecule Biochemistry	2.75E-03
Lipid Metabolism	2.75E-03
Small Molecule Biochemistry	2.75E-03
Hematological Disease	2.75E-03
Hereditary Disorder	2.75E-03
Hematological Disease	2.75E-03
Hereditary Disorder	2.75E-03
Cellular Assembly and Organization	2.75E-03
Tissue Development	2.75E-03
Cell-To-Cell Signaling and Interactio	2.75E-03
Nervous System Development and F	2.75E-03
Infectious Disease	2.75E-03
Amino Acid Metabolism	2.76E-03
Nervous System Development and F	3.91E-03
Cell Death and Survival	4.12E-03
Cellular Assembly and Organization	4.12E-03
Skeletal and Muscular System Devel	4.12E-03
Organ Morphology	4.12E-03
Renal and Urological Disease	4.12E-03
Inflammatory Disease	4.12E-03
Inflammatory Response	4.12E-03
Carbohydrate Metabolism	4.12E-03
Small Molecule Biochemistry	4.12E-03
Nucleic Acid Metabolism	4.12E-03
Neurological Disease	4.12E-03
Behavior	4.12E-03
Drug Metabolism	4.12E-03
Small Molecule Biochemistry	4.12E-03
Amino Acid Metabolism	4.12E-03
Post-Translational Modification	4.37E-03
Protein Folding	4.37E-03
Cell Morphology	4.73E-03
Tissue Morphology	4.73E-03
Organ Morphology	4.73E-03
Digestive System Development and I	4.73E-03
Hepatic System Development and Fu	4.73E-03
Behavior	5.37E-03
Digestive System Development and I	5.37E-03
Organ Morphology	5.49E-03
Digestive System Development and I	5.49E-03
Hepatic System Development and Fu	5.49E-03
Tissue Morphology	5.49E-03
Organ Morphology	5.49E-03

Cardiovascular System Development	5.49E-03
Developmental Disorder	5.49E-03
Neurological Disease	5.49E-03
Cellular Compromise	5.49E-03
Cellular Function and Maintenance	5.49E-03
Skeletal and Muscular System Devel	5.49E-03
Small Molecule Biochemistry	5.49E-03
Small Molecule Biochemistry	5.49E-03
Amino Acid Metabolism	5.49E-03
Cellular Function and Maintenance	5.76E-03
Cell-mediated Immune Response	5.76E-03
Cellular Development	5.76E-03
Hematological System Development	5.76E-03
Hematopoiesis	5.76E-03
Lymphoid Tissue Structure and Deve	5.76E-03
Nervous System Development and F	6.04E-03
Organ Morphology	6.04E-03
Infectious Disease	6.33E-03
Cancer	6.33E-03
Reproductive System Disease	6.33E-03
Cell-To-Cell Signaling and Interactio	6.86E-03
Hematological System Development	6.86E-03
Molecular Transport	6.86E-03
Cell Death and Survival	6.86E-03
Molecular Transport	6.86E-03
Cellular Function and Maintenance	6.86E-03
Developmental Disorder	6.89E-03
Hereditary Disorder	6.89E-03
Metabolic Disease	6.89E-03
Endocrine System Disorders	7.18E-03
Post-Translational Modification	7.49E-03
Behavior	7.85E-03
Digestive System Development and I	7.85E-03
Molecular Transport	8.23E-03
Skeletal and Muscular System Devel	8.23E-03
Tissue Development	8.23E-03
Cellular Development	8.23E-03
Lipid Metabolism	8.23E-03
Small Molecule Biochemistry	8.23E-03
Drug Metabolism	8.23E-03
Endocrine System Development and	8.23E-03
Small Molecule Biochemistry	8.23E-03
Amino Acid Metabolism	8.23E-03
Carbohydrate Metabolism	8.23E-03
Small Molecule Biochemistry	8.23E-03
Renal and Urological Disease	8.23E-03
Cancer	8.23E-03
Cell Death and Survival	8.43E-03
Lipid Metabolism	9.41E-03

Small Molecule Biochemistry	9.41E-03
Vitamin and Mineral Metabolism	9.41E-03
Behavior	9.60E-03
Embryonic Development	9.60E-03
Organismal Development	9.60E-03
Skeletal and Muscular System Devel	9.60E-03
Tissue Development	9.60E-03
Connective Tissue Development and	9.60E-03
Organ Development	9.60E-03
Molecular Transport	9.60E-03
Small Molecule Biochemistry	9.60E-03
Vitamin and Mineral Metabolism	9.60E-03
Cell Signaling	9.60E-03
Lipid Metabolism	9.60E-03
Small Molecule Biochemistry	9.60E-03
DNA Replication, Recombination, an	9.60E-03
Tissue Morphology	9.60E-03
Nervous System Development and F	9.60E-03
Molecular Transport	9.75E-03
Small Molecule Biochemistry	9.75E-03
Drug Metabolism	9.75E-03
Behavior	1.08E-02
Organ Morphology	1.10E-02
Embryonic Development	1.10E-02
Organismal Development	1.10E-02
Cellular Compromise	1.10E-02
Cellular Function and Maintenance	1.10E-02
Cell-To-Cell Signaling and Interactio	1.10E-02
Hematological System Development	1.10E-02
Cellular Growth and Proliferation	1.10E-02
Cellular Development	1.10E-02
Cancer	1.10E-02
Organ Development	1.10E-02
Cellular Growth and Proliferation	1.10E-02
Respiratory Disease	1.10E-02
Molecular Transport	1.10E-02
Infectious Disease	1.10E-02
Neurological Disease	1.10E-02
Organismal Development	1.10E-02
Cellular Movement	1.10E-02
Skeletal and Muscular System Devel	1.14E-02
Nervous System Development and F	1.14E-02
Infectious Disease	1.22E-02
Molecular Transport	1.23E-02
Embryonic Development	1.23E-02
Organismal Development	1.23E-02
Tissue Development	1.23E-02
Skeletal and Muscular System Devel	1.23E-02
Tissue Development	1.23E-02

Cellular Development	1.23E-02
Small Molecule Biochemistry	1.23E-02
Cellular Function and Maintenance	1.23E-02
Carbohydrate Metabolism	1.23E-02
Small Molecule Biochemistry	1.23E-02
Nucleic Acid Metabolism	1.23E-02
Free Radical Scavenging	1.23E-02
Organismal Development	1.29E-02
Cell Cycle	1.37E-02
Nervous System Development and F	1.37E-02
Organ Morphology	1.37E-02
Hematological Disease	1.37E-02
Metabolic Disease	1.37E-02
Embryonic Development	1.37E-02
Organismal Development	1.37E-02
Cellular Compromise	1.37E-02
Cellular Function and Maintenance	1.37E-02
Tissue Morphology	1.37E-02
Cell Morphology	1.37E-02
Cellular Assembly and Organization	1.37E-02
Small Molecule Biochemistry	1.37E-02
Nucleic Acid Metabolism	1.37E-02
Embryonic Development	1.50E-02
Organismal Development	1.50E-02
Tissue Development	1.50E-02
Organismal Development	1.50E-02
Tissue Morphology	1.50E-02
Cardiovascular System Development	1.50E-02
Embryonic Development	1.64E-02
Organismal Development	1.64E-02
Developmental Disorder	1.64E-02
Hereditary Disorder	1.64E-02
Metabolic Disease	1.64E-02
Renal and Urological Disease	1.64E-02
Immunological Disease	1.74E-02
Cell Morphology	1.78E-02
Tissue Morphology	1.78E-02
Nervous System Development and F	1.78E-02
Molecular Transport	1.78E-02
Small Molecule Biochemistry	1.78E-02
Amino Acid Metabolism	1.78E-02
Tissue Morphology	1.78E-02
Lipid Metabolism	1.78E-02
Small Molecule Biochemistry	1.78E-02
Molecular Transport	1.78E-02
Small Molecule Biochemistry	1.78E-02
Amino Acid Metabolism	1.78E-02
Behavior	1.84E-02
Organismal Injury and Abnormalities	1.91E-02

Renal and Urological Disease	1.91E-02
Organismal Injury and Abnormalities	1.91E-02
Organismal Development	1.91E-02
Tissue Morphology	1.91E-02
Cardiovascular System Development	1.91E-02
Embryonic Development	2.02E-02
Organismal Development	2.02E-02
Cell-To-Cell Signaling and Interactio	2.05E-02
Inflammatory Response	2.05E-02
Hematological System Development	2.05E-02
Immune Cell Trafficking	2.05E-02
Connective Tissue Disorders	2.17E-02
Skeletal and Muscular Disorders	2.17E-02
Tissue Morphology	2.18E-02
Tissue Morphology	2.18E-02
Small Molecule Biochemistry	2.18E-02
Vitamin and Mineral Metabolism	2.18E-02
Cell Signaling	2.18E-02
Molecular Transport	2.18E-02
Small Molecule Biochemistry	2.18E-02
Protein Synthesis	2.18E-02
Endocrine System Development and	2.18E-02
Nervous System Development and F	2.32E-02
Organ Morphology	2.32E-02
Embryonic Development	2.32E-02
Organismal Development	2.32E-02
Tissue Development	2.32E-02
Organ Morphology	2.32E-02
Organ Development	2.32E-02
Visual System Development and Fun	2.32E-02
Protein Synthesis	2.32E-02
Protein Degradation	2.32E-02
Tissue Morphology	2.32E-02
Organ Morphology	2.32E-02
Lymphoid Tissue Structure and Deve	2.32E-02
Skeletal and Muscular Disorders	2.32E-02
Lipid Metabolism	2.32E-02
Small Molecule Biochemistry	2.32E-02
Hematological System Development	2.45E-02
Organismal Functions	2.45E-02
Neurological Disease	2.45E-02
Tissue Morphology	2.45E-02
Molecular Transport	2.45E-02
Small Molecule Biochemistry	2.45E-02
Amino Acid Metabolism	2.45E-02
Cellular Development	2.47E-02
Cellular Growth and Proliferation	2.47E-02
Cell Morphology	2.58E-02
Cellular Assembly and Organization	2.58E-02

Organismal Injury and Abnormalities	2.58E-02
Dermatological Diseases and Conditi	2.58E-02
Organ Morphology	2.62E-02
Cardiovascular System Development	2.62E-02
Organ Morphology	2.70E-02
Digestive System Development and I	2.70E-02
Hepatic System Development and Fu	2.70E-02
Inflammatory Disease	2.72E-02
Dermatological Diseases and Conditi	2.72E-02
Molecular Transport	2.72E-02
Small Molecule Biochemistry	2.72E-02
Nucleic Acid Metabolism	2.72E-02
Connective Tissue Disorders	2.72E-02
Metabolic Disease	2.72E-02
Skeletal and Muscular Disorders	2.72E-02
Nutritional Disease	2.72E-02
Small Molecule Biochemistry	2.76E-02
Amino Acid Metabolism	2.76E-02
Connective Tissue Disorders	2.76E-02
Skeletal and Muscular Disorders	2.76E-02
Inflammatory Disease	2.76E-02
Immunological Disease	2.76E-02
Post-Translational Modification	2.85E-02
Hematological Disease	2.85E-02
Metabolic Disease	2.85E-02
Molecular Transport	2.85E-02
Small Molecule Biochemistry	2.85E-02
Cellular Function and Maintenance	2.85E-02
Neurological Disease	2.89E-02
Tissue Morphology	2.99E-02
Organ Morphology	2.99E-02
Reproductive System Development a	2.99E-02
Molecular Transport	2.99E-02
Small Molecule Biochemistry	2.99E-02
Nucleic Acid Metabolism	2.99E-02
Cell Death and Survival	2.99E-02
Cardiovascular System Development	2.99E-02
Molecular Transport	2.99E-02
Lipid Metabolism	2.99E-02
Small Molecule Biochemistry	2.99E-02
Drug Metabolism	2.99E-02
Vitamin and Mineral Metabolism	2.99E-02
Cell Morphology	2.99E-02
Cellular Function and Maintenance	2.99E-02
Organ Morphology	2.99E-02
Endocrine System Development and	2.99E-02
Cancer	3.12E-02
Gastrointestinal Disease	3.12E-02
Infectious Disease	3.12E-02

Renal and Urological Disease	3.25E-02
Cancer	3.25E-02
Molecular Transport	3.25E-02
Lipid Metabolism	3.25E-02
Small Molecule Biochemistry	3.25E-02
Amino Acid Metabolism	3.25E-02
Embryonic Development	3.25E-02
Tissue Morphology	3.25E-02
Cellular Assembly and Organization	3.52E-02
Tissue Development	3.65E-02
Cell-To-Cell Signaling and Interactio	3.65E-02
Reproductive System Development a	3.65E-02
Cancer	3.65E-02
Reproductive System Disease	3.65E-02
Neurological Disease	3.65E-02
Skeletal and Muscular Disorders	3.65E-02
Inflammatory Disease	3.65E-02
Tissue Morphology	3.70E-02
Embryonic Development	3.79E-02
Organismal Development	3.79E-02
Skeletal and Muscular System Devel	3.79E-02
Tissue Development	3.79E-02
Organ Morphology	3.79E-02
Connective Tissue Development and	3.79E-02
Organ Development	3.79E-02
Cellular Development	3.79E-02
Hematopoiesis	3.79E-02
Cellular Development	3.92E-02
Hematological System Development	3.92E-02
Hematopoiesis	3.92E-02
Cell Cycle	3.92E-02
Protein Synthesis	3.92E-02
Protein Degradation	3.92E-02
Nervous System Development and F	4.04E-02
Cell Morphology	4.05E-02
Organ Morphology	4.05E-02
Digestive System Development and	4.05E-02
Endocrine System Development and	4.05E-02
Organ Morphology	4.05E-02
Digestive System Development and	4.05E-02
Endocrine System Development and	4.05E-02
Cell Morphology	4.05E-02
Tissue Morphology	4.05E-02
Nervous System Development and F	4.05E-02
Organ Morphology	4.05E-02
Behavior	4.05E-02
Cellular Assembly and Organization	4.05E-02
Cellular Function and Maintenance	4.05E-02
Cell Death and Survival	4.17E-02

Hematological Disease	4.18E-02
Endocrine System Disorders	4.18E-02
Embryonic Development	4.18E-02
Organismal Development	4.18E-02
Protein Synthesis	4.18E-02
Tissue Morphology	4.18E-02
Cardiovascular System Development	4.18E-02
Tissue Morphology	4.32E-02
Embryonic Development	4.32E-02
Organismal Development	4.32E-02
Tissue Development	4.32E-02
Organ Morphology	4.32E-02
Organ Development	4.32E-02
Visual System Development and Fun	4.32E-02
Molecular Transport	4.33E-02
Embryonic Development	4.45E-02
Organismal Development	4.45E-02
Tissue Development	4.45E-02
Organ Morphology	4.45E-02
Organ Development	4.45E-02
Visual System Development and Fun	4.45E-02
Cell Morphology	4.58E-02
Tissue Morphology	4.58E-02
Cell-To-Cell Signaling and Interactio	4.58E-02
Nervous System Development and F	4.58E-02
Nervous System Development and F	4.58E-02
Organ Morphology	4.58E-02
Cell Death and Survival	4.58E-02
Inflammatory Response	4.58E-02
Cellular Movement	4.58E-02
Respiratory Disease	4.71E-02
Organismal Injury and Abnormalities	4.71E-02
Cellular Development	4.72E-02
Cellular Growth and Proliferation	4.72E-02
Cellular Assembly and Organization	4.84E-02
Nervous System Development and F	4.84E-02
Cellular Function and Maintenance	4.84E-02
Nervous System Development and F	4.97E-02
Cell Death and Survival	4.97E-02

Canonical Pathways	pvalue
Superpathway of Methionine Degr	0.00347
Caveolar-mediated Endocytosis Si	0.0049
L-cysteine Degradation II	0.00692
Cysteine Biosynthesis/Homocystei	0.01096
Pentose Phosphate Pathway (Oxid	0.0138
Methylmalonyl Pathway	0.01622
2-oxobutanoate Degradation I	0.02291
Lipid Antigen Presentation by CD1	0.02692
Pentose Phosphate Pathway	0.0302
γ-linolenate Biosynthesis II (Anim	0.03236
Role of Lipids/Lipid Rafts in the Pa	0.03388
Cysteine Biosynthesis III (mamma	0.04074
Circadian Rhythm Signaling	0.04677
Protein Ubiquitination Pathway	0.04898
Antigen Presentation Pathway	0.05012
Amyloid Processing	0.06918
Hypoxia Signaling in the Cardiova	0.08511
Mitotic Roles of Polo-Like Kinase	0.08913
Role of Wnt/GSK-3β Signaling in t	0.10209
Prostate Cancer Signaling	0.11194
Nitric Oxide Signaling in the Cardi	0.11455
Neuregulin Signaling	0.1205
PPAR Signaling	0.1219
Telomerase Signaling	0.12912
PI3K/AKT Signaling	0.16218
Aryl Hydrocarbon Receptor Signal	0.18072
eNOS Signaling	0.18072
Mitochondrial Dysfunction	0.1932
Aldosterone Signaling in Epithelia	0.20091
Gap Junction Signaling	0.20749
Wnt/β-catenin Signaling	0.21086
Dopamine-DARPP32 Feedback in	0.21429
Role of NFAT in Regulation of the	0.21627
PPARα/RXRα Activation	0.21979
Calcium Signaling	0.22699
Glucocorticoid Receptor Signaling	0.30974
Xenobiotic Metabolism Signaling	0.32961