



**Recent References (2015-Present) on the Administration of Bromodeoxyuridine
Using ALZET® Osmotic Pumps**

Q10333: S. K. Sinha, *et al.* Local M-CSF (Macrophage Colony-Stimulating Factor) Expression Regulates Macrophage Proliferation and Apoptosis in Atherosclerosis. *Arteriosclerosis Thrombosis and Vascular Biology* 2021;41(1):220-233

Agents: Uridine, bromodeoxy- **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 2 weeks;

ALZET Comments: Dose: (50 µg per day); animal info: 8- to 10-week-old female and male mice WT background; bromodeoxyuridine aka (BrdU); cardiovascular

Q10065: C. Schnoz, *et al.* Deletion of the transcription factor Prox-1 specifically in the renal distal convoluted tubule causes hypomagnesemia via reduced expression of TRPM6 and NCC. *Pflügers Archiv* 2021;473(1):79-93

Agents: Bumetanide; Uridine, bromodeoxy- **Vehicle:** Water; PEG 300; **Route:** SC; **Species:** Mice; **Pump:** 2001; **Duration:** 3 days;

ALZET Comments: Dose (40 mg/kg/day Bumetanide; 40 mg/kg/day bromodeoxyuridine); dependence;

Q8822: A. Recabal, *et al.* The FGF2-induced tanycyte proliferation involves a connexin 43 hemichannel/purinergic-dependent pathway. *Journal of Neurochemistry* 2021;156(2):182-199

Agents: Uridine, bromodeoxy-; Fibroblast Growth Factor 2; Gap27 **Vehicle:** CSF; **Route:** CSF/CNS; **Species:** Rat; **Pump:** 1007D; **Duration:** 7 days;

ALZET Comments: Dose (0.75 ug/h BrdU, 0.0125 ug/hr FGF2, 0.13 ug/h Gap27); Controls received mp w/ vehicle; animal info (Male, Sprague Dawley, 120-280 g); Bromodeoxyuridine aka BrdU, Fibroblast Growth Factor 2 aka FGF2, Gap27 aka selective Cx43HC inhibitor ; enzyme inhibitor (Cx43HC Inhibitor); dental cement used;dependence;

Q10292: K. Ogata, *et al.* Club Cells Are the Primary Target for Permethrin-Induced Mouse Lung Tumor Formation. *Toxicological Sciences* 2021;184(1):15-32

Agents: Uridine, bromodeoxy- **Vehicle:** DMSO; **Route:** SC; **Species:** Mice; **Pump:** 2001; **Duration:** 7 days;

ALZET Comments: Dose:(200 uL); 10% DMSO vehicle used; Controls received mp w/ vehicle; animal info: Female mice, 10 weeks old; Bromodeoxyuridine aka (BrdU); dependence;

Q10001: M. Lafranconi, *et al.* A 90-day drinking water study in mice to characterize early events in the cancer mode of action of 1,4-dioxane. *Regulatory Toxicology and Pharmacology* 2021;119(104819

Agents: Uridine, bromodeoxy **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2ML1; **Duration:** 8 days;

ALZET Comments: Animal info (Female B6D2F1/Crl mice, 5 to 8 weeks old); bromodeoxyuridine aka BrdU; cancer (tumor development);

Q9306: S. Kikusaki, *et al.* Prevention of postoperative intrapericardial adhesion by dextrin hydrogel. *General Thoracic and Cardiovascular Surgery* 2021;69(9):1326-1334

Agents: Uridine, bromodeoxy- **Vehicle:** Not Stated; **Route:** Abdomen; **Species:** Rabbit; **Pump:** 2ML2; **Duration:** 14 days;

ALZET Comments: Animal info (male Japanese white rabbits, 2.5-3.0 kg); bromodeoxyuridine aka BrdU; cardiovascular;

Q9208: E. I. Dedkov. Large- and Medium-sized Arteries Remaining in Transmural Scar Distal to Permanent Coronary Ligation Undergo Neointimal Hyperplasia and Inward Remodeling. *Journal of Histochemistry & Cytochemistry* 2021;69(5):321-338

Agents: Uridine, 5-bromo-2'-deoxy- **Vehicle:** PBS; **Route:** Not Stated; **Species:** Rat; **Pump:** Not Stated; **Duration:** 3 days;

ALZET Comments: Dose (12.5 mg/kg/day); animal info (12-month-old male Sprague-Dawley rats); 5-bromo-2'-deoxyuridine aka BrdU; dependence;

Q9923: T. Yamada, *et al.* Comparison of the Hepatic Effects of Phenobarbital in Chimeric Mice Containing Either Rat or Human Hepatocytes With Humanized Constitutive Androstane Receptor and Pregnane X Receptor Mice. *Toxicological Sciences* 2020;177(2):362-376

Agents: 5-bromo-2-deoxy-uridine **Vehicle:** Not stated; **Route:** SC; **Species:** Mice; **Pump:** 2ML1; **Duration:** 7 days;

ALZET Comments: Dose (40 or 200 ug/hr); animal info (Male); 5-bromo-2-deoxy-uridine aka BrdU ; dependence;



Q8621: B. G. Lake, *et al.* Piperonyl butoxide: Mode of action analysis for mouse liver tumour formation and human relevance. *Toxicology* 2020;439(152465)

Agents: Uridine, 5-bromo-5'-deoxy- **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Pump:** 2001; **Duration:** 7 days;

ALZET Comments: Dose (15 mg/mL); animal info (Male Crl:CD-1 mice, approximately 42 days old); 5-bromo-5'-deoxyuridine aka BrdU; dependence;

Q8564: K. Kawamoto, *et al.* Cell proliferation analysis is a reliable predictor of lack of carcinogenicity: Case study using the pyrethroid imiprothrin on lung tumorigenesis in mice. *Regulatory Toxicology and Pharmacology* 2020;113(104646)

Agents: Bromodeoxy, uridine **Vehicle:** DMSO; **Route:** SC; **Species:** Mice; **Pump:** 2001; **Duration:** 7 days;

ALZET Comments: Dose (40 mg BrdU/mL); 10% DMSO used; animal info (Male mice aged 9 weeks); bromodeoxyuridine aka BrdU; cancer (carcinogenicity);

Q9039: C. Wiemann, *et al.* Metazachlor: Mode of action analysis for rat liver tumour formation and human relevance. *Toxicology* 2019;426(152282)

Agents: Uridine, bromodeoxy- **Vehicle:** Saline; **Route:** Not Stated; **Species:** Rat; **Pump:** 2ML1; **Duration:** 7 days;

ALZET Comments: Dose (20 mg/ml); animal info (male and female Wistar rats); Bromodeoxyuridine aka BrdU; dependence;

Q8814: L. E. Ragle, *et al.* Long-label-retaining mammary epithelial cells are created early in ductal development and distributed throughout the branching ducts. *Mechanisms of Development* 2019;159(103565)

Agents: Uridine, 5-bromodeoxy- **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 14 days;

ALZET Comments: Dose (0.1 mg); animal info (3 weeks old); 5-bromodeoxyuridine aka 5BrdU; dependence;

R0384: A. A. Pieper, *et al.* Benefits of Enhancing Nicotinamide Adenine Dinucleotide Levels in Damaged or Diseased Nerve Cells. *Cold Spring Harbor Symposia on Quantitative Biology* 2019;

Agents: Uridine, bromodeoxy-; aminopropylcarbazole **Vehicle:** Not stated; **Route:** CSF/CNS; **Species:** Mice; **Pump:** Not stated; **Duration:** 1 week;

ALZET Comments: neurodegenerative (missing NPAS3 impaired hippocampal neurogenesis); Therapeutic indication (Missing NPAS1 enhanced hippocampal neurogenesis);

Q8277: S. I. Masunaga, *et al.* Effects of p53 Status of Tumor Cells and Combined Treatment With Mild Hyperthermia, Wortmannin or Caffeine on Recovery From Radiation-Induced Damage. *World J Oncol* 2019;10(3):132-141

Agents: 5-bromo-2'-deoxyuridine **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2001; **Duration:** 7 days;

ALZET Comments: animal info (6-7 weeks old, Female, Balb/c); 5-bromo-2'-deoxyuridine aka BrdU; dependence;

Q9801: S. I. Masunaga, *et al.* Usefulness of combination with both continuous administration of hypoxic cytotoxin and mild temperature hyperthermia in boron neutron capture therapy in terms of local tumor response and lung metastatic potential. *International Journal of Radiation Biology* 2019;95(12):1708-1717

Agents: 5-bromo-2'-deoxyuridine **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 6 days;

ALZET Comments: Dose (250 mg/mL); Controls received mp w/ vehicle; animal info (C57Bl/6, Female, 8 weeks old); 5-bromo-2'-deoxyuridine aka BrdU ; cancer (Tumor);

Q8278: S. I. Masunaga, *et al.* Effect of a change in reactor power on response of murine solid tumors in vivo, referring to impact on quiescent tumor cell population. *Int J Radiat Biol* 2019;95(5):635-645

Agents: 5-bromo-2'-deoxyuridine **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not stated; **Duration:** 5 days;

ALZET Comments: Dose (200-250 mg/ml); animal info (C3H/He, 8-11 weeks old, 22.1 g); 5-bromo-2'-deoxyuridine aka BrdU; cancer (Tumor Cells);



Q7617: A. Kostin, *et al.* Chronic Suppression of Hypothalamic Cell Proliferation and Neurogenesis Induces Aging-Like Changes in Sleep-Wake Organization in Young Mice. *Neuroscience* 2019;404(541-556

Agents: Arabinofuranoside, cytosine-beta-D-; deoxyuridine, 5-bromo-2'- **Vehicle:** CSF, Artificial; **Route:** CSF/CNS (lateral ventricle); **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks;

ALZET Comments: Dose (AraC 15 mg/ml, 2.69 µl/day), (BrdU 4 mg/ml); Controls received mp w/ vehicle and BrdU; animal info (3-4 or 23-24 months, C57BL/6J); functionality of mp verified by residual volume and BrdU staining; cytosine beta-D-arabinofuranoside (AraC) is an antimitotic agent previously shown to suppress hypothalamic proliferation and neurogenesis; Brain coordinates (2 mm dorsal to the lateral ventricle (LV: anterior-posterior, -0.3 mm; dorsal-ventral, 2.5 mm; and lateral, 1.0 mm from the bregma)); Cannula placement verified via photomicrograph of histological section; "We used micro-osmotic pump and ICV administration for chronic delivery of aCSF or AraC, which provided good control of drug concentration and continuous delivery without disturbing animals. This method also reduced the likelihood that treatment effects on sleep-wake function could be due to stress of daily or multiple IP injections or mechanical or inflammatory responses of the sites examined in this study due to local manipulation." pg.552; "We also noted that, unlike the control group, the AraC+BrdU-treated mice did not maintain their nests well." p.545;

Q6967: M. Kondo, *et al.* Involvement of peroxisome proliferator-activated receptor-alpha in liver tumor production by permethrin in the female mouse. *Toxicol Sci* 2019;

Agents: Uridine, Bromodeoxy **Vehicle:** DMSO; **Route:** SC; **Species:** Mice; Rat; **Pump:** 2001; 2ML2; **Duration:** 7 days; 14 days; **ALZET Comments:** Dose (8.4 mgBrdU/mouse.; 33.6 mg BrdU/rat); 10% DMSO used; cancer (liver); stress/adverse reaction: One animal was dead due to anesthesia at implantation of osmotic pump;

Q7941: I. Aquila, *et al.* c-kit Haploinsufficiency impairs adult cardiac stem cell growth, myogenicity and myocardial regeneration. *Cell Death Dis* 2019;10(6):436

Agents: Uridine, 5-bromo-2'-deoxy-; Uridine, 5-Ethynyl-2'-deoxy-; Uracil, 5-fluoro- **Vehicle:** Water, Deionized, DMSO buffered; **Route:** SC; **Species:** Mice; **Pump:** Not stated; **Duration:** 7, 25, 28 days; **ALZET Comments:** Dose ((BrdU 50 mg/kg/day), (EdU 50 mg/kg/day), (5-FU 15 mg/kg/day)); 50% deionized water and 50% DMSO used; Controls received mp w/ vehicle; animal info (12 weeks, male, C57BL/6J, Tg-myh6(MCM), and Tg-myh6MCM: R26(mT-mG/+)); cardiovascular; mp used for BrdU and EdU labeling or for ISO + 5-FU induced cardiomyopathy;

Q7933: I. Vitali, *et al.* Progenitor Hyperpolarization Regulates the Sequential Generation of Neuronal Subtypes in the Developing Neocortex. *Cell* 2018;174(5):1264-1276 e15

Agents: Uridine, 5-bromo-2'-deoxy- **Vehicle:** Water; DMSO; **Route:** IP; **Species:** Mice; **Pump:** 1003D; **Duration:** 72 hours; **ALZET Comments:** Dose (16.25 mg/ml); 1:1 ratio of DMSO to water used; animal info (female, CD-1); pumps used for BrdU labeling of pregnant mice;

Q7863: Y. Sanada, *et al.* Disruption of Hif-1alpha enhances cytotoxic effects of metformin in murine squamous cell carcinoma. *International Journal of Radiation Biology* 2018;94(1):88-96

Agents: Uridine, 5-bromo-2'-deoxy- **Vehicle:** Saline, physiological; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 5 days; **ALZET Comments:** Dose (250 mg/mL); animal info (7-8 weeks, female, C3H/He); cancer (squamous cell carcinoma); pumps used for BrdU labeling;

Q8139: H. Mziaut, *et al.* miR-132 controls pancreatic beta cell proliferation and survival in mouse model through the Pten/Akt/Foxo3 signaling. *bioRxiv* 2018;

Agents: Uridine, Bromodeoxy- **Vehicle:** DMSO; **Route:** IP; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days; **ALZET Comments:** Dose (0.5 ul/hr/day); 50% DMSO used; animal info (C57Bl/6N mice with an age of 13-19 weeks and a body weight of 28-34 g); Bromodeoxyuridine aka BrdU ; cardiovascular;



Q7233: O. A. Mineyeva, *et al.* Spatial geometry of stem cell proliferation in the adult hippocampus. *Sci Rep* 2018;8(1):3444

Agents: Thymidine, 5-bromo-2'-deoxyuridine **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 5 days;

ALZET Comments: Dose (3 mg); animal info (2.5 months old, Nestin-GFP mice);

Q8107: E. Magrinelli, *et al.* Simultaneous production of diverse neuronal subtypes during early corticogenesis. *bioRxiv* 2018;

Agents: Uridine, Bromodeoxy **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1003D; **Duration:** 3 days or 7 days;

ALZET Comments: Dose (16 mg/ml both 0.1 ul/hr); animal info (CD1); Bromodeoxyuridine aka BrdU ; neurodegenerative (Corticogenesis);

Q8074: F. C. Lewis-McDougall, *et al.* Senescent, dysfunctional human cardiac progenitor cells (CPCs) accumulate in the aged heart and elimination of senescent cells enhances CPC activation and cardiomyocyte proliferation in aged mice. *bioRxiv* 2018;

Agents: Uridine, bromodeoxy- **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not stated; **Duration:** 14 days;

ALZET Comments: Dose (0.2 M); animal info (22-32 months); Bromodeoxyuridine aka BrdU, thymidine analogue ; dependence;

Q7185: S. E. Iismaa, *et al.* Cardiac hypertrophy limits infarct expansion after myocardial infarction in mice. *Sci Rep* 2018;8(1):6114

Agents: Uridine, 5-bromo-2'-deoxy **Vehicle:** DMSO, Water; **Route:** SC; **Species:** Mice; **Pump:** 2002, 2006; **Duration:** 9 days and 12 weeks;

ALZET Comments: Dose (10 mg/kg/day); 50% DMSO/water used; animal info (16 weeks old male mice); post op. care (bupivacaine, 8 mg/kg, buprenorphine, 0.075 mg/kg); Model 2006 pumps replaced after 6 weeks; long-term study; 5-bromo-2'-deoxyuridine aka BrdU; cardiovascular;

Q7824: C. Haines, *et al.* Comparison of the effects of sodium phenobarbital in wild type and humanized constitutive androstane receptor (CAR)/pregnane X receptor (PXR) mice and in cultured mouse, rat and human hepatocytes. *Toxicology* 2018;396-397(23-32)

Agents: uridine, 5-bromo-2'-deoxy- **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Pump:** 2001; **Duration:** 7 days;

ALZET Comments: Dose (15 mg/ml); PBS (pH 7.4) used; Controls received mp w/ agent; animal info (12 weeks, male, C57BL/6J or hCAR/hPXR); toxicology; minipumps used to measure replicative DNA synthesis;

Q7823: C. Haines, *et al.* Comparison of the hepatic and thyroid gland effects of sodium phenobarbital in wild type and constitutive androstane receptor (CAR) knockout rats and pregnenolone-16alpha-carbonitrile in wild type and pregnane X receptor (PXR) knockout rats. *Toxicology* 2018;400-401(20-27)

Agents: uridine, 5-bromo-2'-deoxy- **Vehicle:** PBS; **Route:** SC; **Species:** Rat; **Pump:** 2ML1; **Duration:** 7 days;

ALZET Comments: Dose (15 mg/ml); PBS (pH 7.4) used; Controls received mp w/ agent; animal info (14 weeks, male, Sprague-Dawley , CAR KO and PXR KO); toxicology; minipumps used for measure replicative DNA synthesis;

Q7027: S. Govindan, *et al.* In vivo pulse labeling of isochronic cohorts of cells in the central nervous system using FlashTag. *Nat Protoc* 2018;13(10):2297-2311

Agents: Uridine, bromodeoxy-, Deoxyuridine, 5-ethynyl-2' **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 1003D;

Duration: 3 days;

ALZET Comments: Dose (16 mg/ml BrdU or 10 mg/ml EdU);

Q7820: J. M. Gonzalez-Rosa, *et al.* Myocardial Polyploidization Creates a Barrier to Heart Regeneration in Zebrafish. *Developmental Cell* 2018;44(4):433-446 e7

Agents: uridine, bromodeoxy- **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** Not Stated;

ALZET Comments: Dose (16 mg/ml); animal info (12 weeks, MHC-ECT2; MHC-nLAC double transgenic or MHC-nLAC single transgenic); cardiovascular; mp used for BrdU labeling;



Q10131: C. Carresi, *et al.* Anti-oxidant effect of bergamot polyphenolic fraction counteracts doxorubicin-induced cardiomyopathy: Role of autophagy and c-kit(pos)CD45(neg)CD31(neg) cardiac stem cell activation. *Journal of Molecular Cellular Cardiology* 2018;119(10-18

Agents: Uridine, bromodeoxy- **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** Not Stated; **Duration:** 21 days; **ALZET Comments:** Dose (0.6M); Controls received mp w/ vehicle; animal info (Wistar male 6–8 weeks, (300 ± 10 g); Bromodeoxyuridine aka (BrdU); cardiovascular; (cardiomyopathy)

Q8178: C. Carresi, *et al.* Anti-oxidant effect of bergamot polyphenolic fraction counteracts doxorubicin-induced cardiomyopathy: Role of autophagy and c-kit(pos)CD45(neg)CD31(neg) cardiac stem cell activation. *J Mol Cell Cardiol* 2018;119(10-18

Agents: Uridine, bromodeoxy- **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Pump:** Not stated; **Duration:** 21 days; **ALZET Comments:** Dose(0.6 M);Controls received mp w/ vehicle; animal info (Wistar male rats (n = 40) at 6–8 weeks of age (body weight 300 ± 10 g)); Bromodeoxyuridine aka BrdU; cardiovascular;

Q10118: R. W. Boyce, *et al.* Decreased osteoprogenitor proliferation precedes attenuation of cancellous bone formation in ovariectomized rats treated with sclerostin antibody. *Bone Reports* 2018;8(90-94

Agents: Uridine, bromodeoxy- **Vehicle:** PBS, Dulbecco's; DMSO; **Route:** SC; **Species:** Rat; **Pump:** 2ML1; **Duration:** 5 days; **ALZET Comments:** Dose (10 µL/h,50 mg/mL); 15% DMSO used; Controls received mp w/ vehicle; (6 mo.old female Sprague-Dawley, 500 g); Uridine, 5-bromo-2'-deoxy aka (BrdU)

Q6551: E. Yulyaningsih, *et al.* Acute Lesioning and Rapid Repair of Hypothalamic Neurons outside the Blood-Brain Barrier. *Cell Reports* 2017;19(11):2257-2271

Agents: Uridine, bromodeoxy-; Fibroblast growth factor, basic **Vehicle:** CSF, artificial; **Route:** CSF/CNS (right lateral ventricle); **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days; **ALZET Comments:** Dose (3.2 mg/ml BrdU; 100 µg/ml bFGF); animal info (12- to 18-week-old Npy-GFP mice and Ai14(tdTomato) mice); Brain coordinates (anteroposterior –0.3 mm, lateral +1.0 mm to bregma and dorsoventral –2.5 mm below skull);

Q6274: L. C. Wehmas, *et al.* Metabolic Disruption Early in Life is Associated With Latent Carcinogenic Activity of Dichloroacetic Acid in Mice. *Toxicol Sci* 2017;159(2):354-365

Agents: Uridine, 5-bromodeoxy- **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Pump:** 2001; **Duration:** 5 days; **ALZET Comments:** Dose (2.4 mg/ml); animal info (B6C3F1 mice); 5-bromo-20-deoxyuridine aka BrdU;

Q6190: Y. Okuda, *et al.* Editor's Highlight: Mode of Action Analysis for Rat Hepatocellular Tumors Produced by the Synthetic Pyrethroid Momfluorothrin: Evidence for Activation of the Constitutive Androstane Receptor and Mitogenicity in Rat Hepatocytes. *Toxicol Sci* 2017;158(2):412-430

Agents: Uridine, 5-bromo-2-deoxy **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Pump:** 2ML1; **Duration:** 7 day; 14 days; **ALZET Comments:** animal info (Wistar strain rats aged 9 weeks; CAR Knockout rats with a CrI:CD genetic background aged 10 weeks and wild-type CrI:CD rats aged 11 weeks);

Q6357: I. R. Miousse, *et al.* Dose-response analysis of epigenetic, metabolic, and apical endpoints after short-term exposure to experimental hepatotoxicants. *Food Chem Toxicol* 2017;109(Pt 1):690-702

Agents: Uridine, bromodeoxy-; **Vehicle:** PBS; **Route:** Not Stated; **Species:** Rat; **Pump:** 2ML1; **Duration:** 7 days; **ALZET Comments:** Dose (20 mg/ml); animal info (Ten-week old male F344/DuCrI rats); Bromodeoxyuridine is a structural analog of thymidine that incorporates into nuclear DNA and is used as a surrogate marker of cell proliferation);

Q6358: R. I. Menzies, *et al.* Transcription controls growth, cell kinetics and cholesterol supply to sustain ACTH responses. *Endocrine Connections* 2017;6(7):446-457

Agents: ACTH; Uridine, bromodeoxy-; **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 2 weeks; **ALZET Comments:** Dose (ACTH: 3 µg/day; BrDU: 1mg/mL); 0.154 M NaCl used; animal info (25g male C57BL6 mice);



Q5831: M. A. Mandell, *et al.* Continual renewal and replication of persistent Leishmania major parasites in concomitantly immune hosts. *Proc Natl Acad Sci U S A* 2017;114(5):E801-E810

Agents: Uridine, Bromodeoxy **Vehicle:** Water; **Route:** Not Stated; **Species:** Mice; **Pump:** 2001D; **Duration:** Not Stated; **ALZET Comments:** Controls received mp w/ vehicle; animal info (6-10 weeks old); comparison of drinking water administration, multiple IP injections every 3 hours for 18 hours, single IP injection and minipump infusion; Dose (7.2 mg);

Q6012: C. J. Choi, *et al.* Mode of action and human relevance of THF-induced mouse liver tumors. *Toxicol Lett* 2017;276(138-143)

Agents: Uridine, bromodeoxy **Vehicle:** PBS; **Route:** SC; **Species:** Mice (knockout); **Pump:** 2001; **Duration:** 7 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (6-7 weeks; 17-20g); Therapeutic indication (THF, Liver tumor); Dose (15 mg/mL);

Q6410: C. N. Brocker, *et al.* Hepatocyte-specific PPARA expression exclusively promotes agonist-induced cell proliferation without influence from nonparenchymal cells. *American Journal of Physiology Gastrointestinal and Liver Physiology* 2017;312(3):G283-G299

Agents: Uridine, bromodeoxy- **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice (knockout); **Pump:** 1007D; **Duration:** 7 days; **ALZET Comments:** animal info (8-10 week old Ppara wild-type (Ppara_{+/+}) and conventional Ppara-null (Ppara_{-/-}) mice);

Q5096: H. Williams, *et al.* Wnt2 and WISP-1/CCN4 Induce Intimal Thickening via Promotion of Smooth Muscle Cell Migration. *Arteriosclerosis, Thrombosis, and Vascular Biology* 2016;36(7):1417-24

Agents: Uridine, bromodeoxy- **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice (transgenic); **Pump:** 2004; **Duration:** 3 days; 28 days; **ALZET Comments:** animal info (Wnt2 +/-); cardiovascular;

Q6513: M. L. Thompson, *et al.* Preventing painful age-related bone fractures: Anti-sclerostin therapy builds cortical bone and increases the proliferation of osteogenic cells in the periosteum of the geriatric mouse femur. *Mol Pain* 2016;12(Agents:

Uridine, bromodeoxy **Vehicle:** PBS, Dulbecco's; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days; **ALZET Comments:** animal info (adult male C57BL/6 J mice.); Controls received mp w/ vehicle;

Q6652: S. Ribback, *et al.* The Epidermal Growth Factor Receptor (EGFR) Inhibitor Gefitinib Reduces but Does Not Prevent Tumorigenesis in Chemical and Hormonal Induced Hepatocarcinogenesis Rat Models. *Int J Mol Sci* 2016;17(10):

Agents: Uridine, bromodeoxy **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Rat; **Pump:** 2ML1; **Duration:** 7 days; **ALZET Comments:** animal info (inbred male and female Lewis rats); 5-Bromo-20-deoxyuridine AKA (BrdU); cancer (Hepatocellular carcinoma);

Q6565: A. Jourdon, *et al.* Prss56, a novel marker of adult neurogenesis in the mouse brain. *Brain Structure and Function* 2016;221(9):4411-4427

Agents: Uridine, 5-bromodeoxy; Growth factor, basic fibroblast **Vehicle:** CSF, artificial; Albumin, mouse serum; **Route:** CSF/CNS (right lateral ventricle); **Species:** Mice; **Pump:** Not Stated; **Duration:** 7 days; **ALZET Comments:** animal info (3 month old Prss56Cr mice); Brain coordinates (-0.5 mm; L: +1.2 mm; DV:-2.5 mm);

Q5340: P. Douvaras, *et al.* Abnormal corneal epithelial maintenance in mice heterozygous for the micropinna microphthalmia mutation *Mp*. *Experimental Eye Research* 2016;149(26-39)

Agents: Uridine, Bromodeoxy- **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 7 days; **ALZET Comments:** Controls received mp w/ vehicle; animal info (15-week old Mp/+ mice); functionality of mp verified by corneal imaging; Dose (50 mg/ml);

Q5303: S. Di Siena, *et al.* Activated c-Kit receptor in the heart promotes cardiac repair and regeneration after injury. *Cell Death & Disease* 2016;7(7):e2317

Agents: Uridine, Bromodeoxy **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 30 days; **ALZET Comments:** post op. care (500 µl glucose solution (5% glucose/physiologic solution), analgesic Atradol (3 mg/kg); Dose (0.6 M);



Q5773: R. E. Cohen, *et al.* Adult Neurogenesis Leads to the Functional Reconstruction of a Telencephalic Neural Circuit. *J Neurosci* 2016;36(34):8947-56

Agents: Uridine, Bromodeoxy **Vehicle:** Saline, DMSO; **Route:** SC; **Species:** bird (sparrow); **Pump:** 1007D; **Duration:** 5 days;
ALZET Comments: Controls received mp w/ vehicle; animal info; 7.5% NaCl and 15% DMSO used; Therapeutic indication (Neurogenesis, plasticity); Dose (50 mg/kg);

Q4584: V. V. Sherstnev, *et al.* Long-lived newly formed neurons in the mature brain are involved in the support of learning and memory processes. *Neurochemical Journal* 2015;9(13-19)

Agents: Uridine, 5-bromo-2-deoxy- **Vehicle:** Saline, sterile; **Route:** CSF/CNS; **Species:** Rat; **Pump:** 2002; **Duration:** 14 days;
ALZET Comments: Animal info (male, Wistar, 12 weeks old, 220-250g); behavioral testing (morris water maze); pumps removed after 14 days;

Q4281: R. J. Rasoulpour, *et al.* Pronamide: Human relevance of liver-mediated rat leydig cell tumors. *REGULATORY TOXICOLOGY AND PHARMACOLOGY* 2015;72(394-404)

Agents: Uridine, 5-bromo-2-deoxy- **Vehicle:** PBS; **Route:** SC; **Species:** Rat; **Pump:** 2ML2; **Duration:** 14 days;
ALZET Comments: Animal info (male, Crl:CD(SC), 14-16 months old); "This implantation method insured a constant, uniform, systemic delivery of BrdU during the two week exposure period." pg 396;

Q4053: D. Pruthi, *et al.* Exposure to Experimental Preeclampsia in Mice Enhances the Vascular Response to Future Injury. *Hypertension* 2015;65(863-+)

Agents: Uridine, bromodeoxy- **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 14 days;
ALZET Comments: Animal info (female, CD1, 2 months postpartum); cardiovascular; bp measured using tail cuff;

Q4491: Y. H. Lee, *et al.* Cellular origins of cold-induced brown adipocytes in adult mice. *FASEB JOURNAL* 2015;29(286-299)

Agents: Norepinephrine; uridine, 5-bromo-2'-deoxyuridine **Vehicle:** Ascorbic acid; **Route:** Not Stated; **Species:** Mice; **Pump:** Not Stated; **Duration:** 7 days;
ALZET Comments: Controls received mp w/ vehicle; animal info (C57BL6J or tdTomato);

Q4481: J. E. Klaunig, *et al.* Mechanism of 1,3-Dichloropropene-Induced Rat Liver Carcinogenesis. *TOXICOLOGICAL SCIENCES* 2015;143(6-15)

Agents: Uridine, 5-bromo-2-deoxy- **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Rat; **Pump:** Not Stated; **Duration:** 7 days;
ALZET Comments: Animal info (male, F344 rat, 6-4 weeks old);

Q4455: R. W. Hunter, *et al.* Hypertrophy in the Distal Convolute Tubule of an 11-Hydroxysteroid Dehydrogenase Type 2 Knockout Model. *JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY* 2015;26(1537-1548)

Agents: Uridine, bromodeoxy-; furosemide **Vehicle:** DMSO; **Route:** SC; **Species:** Mice; **Pump:** 1007D; 2001; **Duration:** 7 days;
ALZET Comments: Animal info (WT or Hsd11b2^{-/-}); 50% DMSO used; pumps primed overnight in 37C saline;

Q5143: A. C. Dusabineza, *et al.* Hepatic Stellate Cells Improve Engraftment of Human Primary Hepatocytes: A Preclinical Transplantation Study in an Animal Model. *Cell Transplantation* 2015;24(12):2557-71

Agents: Uridine, bromodeoxy- **Vehicle:** Not Stated; **Route:** IP; **Species:** Mice; **Pump:** 1004; **Duration:** 6 hours; 4 weeks;
ALZET Comments: animal info: SCID mice, females, 20-24 g; GFP+ transgenic mice, males, 35-44 g; gene therapy;

Q4385: G. Cruzan, *et al.* Evaluation of the mode of action of mouse lung tumors induced by 4-methylimidazole. *REGULATORY TOXICOLOGY AND PHARMACOLOGY* 2015;73(501-508)

Agents: Uridine, bromodeoxy **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 5 days;
ALZET Comments: Animal info (C57BL6 or CYP2F2, 8-11 weeks old);