



References on the Administration of Clozapine-N-Oxide  
Using ALZET® Osmotic Pumps

**Q11254:** M. D. M. Cajiao-Manrique, *et al.* A male mouse model of WIN 55,212-2 self-administration to study cannabinoid addiction. *Frontiers in Pharmacology* 2023;14(1143365)

**Agents:** Clozapine-N-oxide **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 2004; **Duration:** 15 days; **ALZET Comments:** 0.9% saline used; Controls received mp w/ vehicle; animal info (Male; 8 weeks old); behavioral testing (Motivation; Persistence of response; Compulsivity); dependence;

**Q10701:** C. Toledo, *et al.* Medullary Astrocytes Mediate Irregular Breathing Patterns Generation in Chronic Heart Failure Through Purinergic P2X7 Receptor Signaling. *EBioMedicine* 2022;80(104044)

**Agents:** Clozapine-N-oxide dihydrochloride **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Strain:** Sprague Dawley; **Pump:** 2ML2; **Duration:** 2 weeks; **ALZET Comments:** Dose (100 mg/kg); Controls received mp w/ vehicle; animal info (Male ; 16 weeks old; Wild-type); gene therapy;

**Q10467:** W. T. Doucette, *et al.* Chronic chemogenetic manipulation of ventral pallidum targeted neurons in male rats fed an obesogenic diet. *Brain Research* 2022;1784(147886)

**Agents:** Clozapine-N-oxide **Vehicle:** Acetic acid; saline; **Route:** SC; **Species:** Rat; **Strain:** Not Stated; **Pump:** 2ML4; **Duration:** 1 month; **ALZET Comments:** Dose: 6 mg/kg/day; animal info (Male; Fed high-fat/high-sugar diet); post op. care (ketoprofen 3 mg/kg); gene therapy; checked that CNO did not precipitate during infusion

**Q10518:** G. Dobrzanski, *et al.* Impact of somatostatin interneurons on interactions between barrels in plasticity induced by whisker deprivation. *Scientific Reports* 2022;12(1):17992

**Agents:** Clozapine N-oxide **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** SOM-IRES-Cre; **Pump:** 1007D; **Duration:** 1 week; **ALZET Comments:** Dose (1 mg/ml); 0.9% saline used; Controls received mp w/ vehicle; animal info (Male; mice; 2-3 months);

**Q10342:** H. Sotoyama, *et al.* Resting-state dopaminergic cell firing in the ventral tegmental area negatively regulates affiliative social interactions in a developmental animal model of schizophrenia. *Translational Psychiatry* 2021;11(1):236

**Agents:** Clozapine-N-oxide **Vehicle:** DMSO; **Route:** SC; **Species:** Rat; **Strain:** EGF; **Pump:** 2002; **Duration:** 10 days; 13 days; **ALZET Comments:** Dose: (1.5 mg/kg/day); Controls received mp w/ vehicle; animal info: model rats; (postnatal week 10–12); behavioral testing: locomotion test in an open field chamber; social interaction; neurodegenerative

**Q8840:** G. A. Rodriguez, *et al.* Chemogenetic attenuation of neuronal activity in the entorhinal cortex reduces Abeta and tau pathology in the hippocampus. *PLOS Biology* 2020;18(8):e3000851

**Agents:** Clozapine-N-Oxide **Vehicle:** DMSO; **Route:** IP; **Species:** Mice; **Strain:** EC-Tau/hAPP; **Pump:** 2006; **Duration:** 6 weeks; **ALZET Comments:** Dose (1 mg/kg/day); 0.05% DMSO used; Clozapine-N-Oxide aka CNO ; neurodegenerative (Alzheimer's)

**Q8862:** J. Jiang, *et al.* Activation of hypothalamic AgRP and POMC neurons evokes disparate sympathetic and cardiovascular responses. *American Journal of Physiology and Heart Circulatory Physiology* 2020;319(5):H1069-H1077

**Agents:** Clozapine-N-Oxide **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** POMCCre; AgRPCre; WT; **Pump:** 1007D; **ALZET Comments:** Dose (2 mg/kg/day); Controls received mp w/ vehicle; animal info (Ten- to twelve-week- old-male mice); Clozapine-N-oxide aka CNO; cardiovascular;

**Q8454:** E. A. Dulka, *et al.* Chemogenetic Suppression of GnRH Neurons during Pubertal Development Can Alter Adult GnRH Neuron Firing Rate and Reproductive Parameters in Female Mice. *eNeuro* 2020;7(3):

**Agents:** Clozapine-N-oxide **Vehicle:** DMSO; **Route:** SC; **Species:** Mice; **Strain:** C57Bl6/J; GnRH-Cre; GnRH-GFP/Cre, CAG-DREADD; **Pump:** 1007D; **Duration:** 7 days; **ALZET Comments:** Dose (0.3 mg/kg); 2.75% DMSO used; Controls received mp w/ vehicle; animal info (Transgenic mice (C57Bl6/J), 2 weeks old); Clozapine-N-oxide aka CNO; dependence;



**Q9077:** B. Stutz, *et al.* Dopamine neuronal protection in the mouse Substantia nigra by GHSR is independent of electric activity. *Molecular Metabolism* 2019;24(120-138

**Agents:** Clozapine-N-oxide; Salvinorin B **Vehicle:** DMSO; Saline; **Route:** SC; **Species:** Mice; **Strain:** DAT-cre; iCre-DAT; DAT-cre-riboTag; iCre-DAT-riboTag; **Pump:** 1007D; **Duration:** 7 days;

**ALZET Comments:** Dose (CNO- 0.3 mg/kg or Salvinorin B- 5 mg/kg); Controls received mp w/ vehicle; animal info (); Clozapine-N-oxide aka CNO, excitatory DREADD agonist, Salvinorin B aka inhibitory DREADD agonist ; neurodegenerative (Parkinson's Disease);

**Q7925:** N. D. Jayaraj, *et al.* Reducing CXCR4-mediated nociceptor hyperexcitability reverses painful diabetic neuropathy. *Journal of Clinical Investigation* 2018;128(6):2205-2225

**Agents:** Clozapine-N-Oxide **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** Nav1.8-Cre;RC::L-hM3

Dq; **Pump:** Not Stated; **Duration:** 4 weeks;

**ALZET Comments:** Dose (10 mg/kg/day); Controls received mp w/ vehicle; Clozapine-N-oxide aka CNO; diabetes;

**Q5793:** F. Donato, *et al.* Stellate cells drive maturation of the entorhinal-hippocampal circuit. *Science* 2017;355(6330):

**Agents:** Clozapine-N-oxide **Vehicle:** Saline; **Route:** SC; **Species:** Mice (neonate); **Strain:** C57/Bl6; **Pump:** 1007D; **Duration:** 7 days;

**ALZET Comments:** Controls received mp w/ vehicle; animal info (11-14 days); clozapine-N-oxide (CNO) Therapeutic indication (learning and memory); Dose (1 mg/kg);

**Q5965:** X. Mason. Neural Circuit Mechanisms Underlying the Exacerbation of Alzheimer's Disease by Chronic Stress. Doctoral dissertation, Harvard Medical School 2015;

**Agents:** Clozapine-N-oxide **Vehicle:** Saline, sterile; **Route:** SC; **Species:** Mice; **Strain:** Swiss Webster; 5xFAD, B6SJL background; **Pump:** 2004; **Duration:** 28 days;

**ALZET Comments:** animal info (Adult male Swiss Webster mice); neurodegenerative (Alzheimer's disease);