

**Recent References (2012-2019) on the Administration of Aldosterone  
Using ALZET® Osmotic Pumps**

- Q5862:** M. J. Butler, R. Ramnath, H. Kadoya, D. Desposito, A. Riquier-Brison, J. K. Ferguson, K. L. Onions, A. S. Ogier, H. ElHegni, R. J. Coward, G. I. Welsh, R. R. Foster, J. Peti-Peterdi and S. C. Satchell. Aldosterone induces albuminuria via matrix metalloproteinase-dependent damage of the endothelial glycocalyx. *Kidney Int* 2019;95(1):94-107  
**ALZET Comments:** Aldosterone; Saline; SC; Mice; 28 days; Dose (0.6 µg/kg/d); 1% saline used; Controls received mp w/ vehicle; animal info (adult male DBA2J mice);
- Q7056:** S. B. Poulsen, K. Limbutara, R. A. Fenton, T. Pisitkun and B. M. Christensen. RNA sequencing of kidney distal tubule cells reveals multiple mediators of chronic aldosterone action. *Physiol Genomics* 2018;50(5):343-354  
**ALZET Comments:** Aldosterone; Saline; DMSO; SC; Mice; 1007D; 6 days; Dose (100 µg/kg/hr); animal info (8-13 week old);
- Q7062:** A. Ono, K. Hirooka, Y. Nakano, E. Nitta, A. Nishiyama and A. Tsujikawa. Gene expression changes in the retina after systemic administration of aldosterone. *Jpn J Ophthalmol* 2018;62(4):499-507  
**ALZET Comments:** Aldosterone; SC; Rat; 2006; 7 days; Dose (80 µg/kg/day); animal info (male Sprague-Dawley rats weighing 200-250g); Therapeutic indication (Retinal ganglion cell loss);
- Q7184:** M. Hulsmans, H. B. Sager, J. D. Roh, M. Valero-Munoz, N. E. Houstis, Y. Iwamoto, Y. Sun, R. M. Wilson, G. Wojtkiewicz, B. Tricot, M. T. Osborne, J. Hung, C. Vinegoni, K. Naxerova, D. E. Sosnovik, M. R. Zile, A. D. Bradshaw, R. Liao, A. Tawakol, R. Weissleder, A. Rosenzweig, F. K. Swirski, F. Sam and M. Nahrendorf. Cardiac macrophages promote diastolic dysfunction. *J Exp Med* 2018;215(2):423-440  
**ALZET Comments:** Aldosterone, D-; Mice; 30 days; Dose (0.30 µg/h); animal info (C57BL/6 mice, 18-30 week old);
- Q7173:** K. Bamberg, U. Johansson, K. Edman, L. William-Olsson, S. Myhre, A. Gunnarsson, S. Geschwindner, A. Aagaard, A. Bjornson Granqvist, F. Jaisser, Y. Huang, K. L. Granberg, R. Jansson-Lofmark and J. Hartleib-Geschwindner. Preclinical pharmacology of AZD9977: A novel mineralocorticoid receptor modulator separating organ protection from effects on electrolyte excretion. *PLoS One* 2018;13(2):e0193380  
**ALZET Comments:** Aldosterone; DMSO; SC; SC; 2ML4; 4 Weeks; Dose (0.75 µg/hr); 0.15% DMSO/sterile water used; animal info (Male Sprague-Dawley rats 240 to 280 g); post op. care (redness cleaned with betadine and a topical antibiotic applied);
- Q5717:** L. Yang, G. Frindt, F. Lang, D. Kuhl, V. Vallon and L. G. Palmer. SGK1-dependent ENaC processing and trafficking in mice with high dietary K intake and elevated aldosterone. *Am J Physiol Renal Physiol* 2017;312(1):F65-F76  
**ALZET Comments:** Aldosterone; Mice; 2001; 7 days; animal info (Sgk1 KO); Dose (12 µg/day);
- Q5921:** B. M. Wynne, A. C. Mistry, O. Al-Khalili, R. Mallick, F. Theilig, D. C. Eaton and R. S. Hoover. Aldosterone Modulates the Association between NCC and ENaC. *Sci Rep* 2017;7(1):4149  
**ALZET Comments:** Aldosterone; DMSO; saline; SC; Mice; 10 days; Controls received mp w/ vehicle; 25% DMSO used; Dose (4 µg/Kg/day);
- Q5970:** J. M. Resch, H. Fenselau, J. C. Madara, C. Wu, J. N. Campbell, A. Lyubetskaya, B. A. Dawes, L. T. Tsai, M. M. Li, Y. Livneh, Q. Ke, P. M. Kang, G. Fejes-Toth, A. Naray-Fejes-Toth, J. C. Geerling and B. B. Lowell. Aldosterone-Sensing Neurons in the NTS Exhibit State-Dependent Pacemaker Activity and Drive Sodium Appetite via Synergy with Angiotensin II Signaling. *Neuron* 2017;96(1):190-206 e7  
**ALZET Comments:** Aldosterone; Ethanol; IP; Mice; 1002; 8-12 days; Controls received mp w/ vehicle; animal info (4-5 week old); functionality of mp verified by plasma aldosterone levels; 5% ethanol used; Dose (900 µg/mL);
- Q5883:** N. Queisser, N. Schupp, E. Schwarz, C. Hartmann, G. G. Mackenzie and P. I. Oteiza. Aldosterone activates the oncogenic signals ERK1/2 and STAT3 via redox-regulated mechanisms. *Mol Carcinog* 2017;56(8):1868-1883  
**ALZET Comments:** Aldosterone; Rat; 2004; 4 hours; Controls received mp w/ PBS; animal info (male, Sprague Dawley, 8 weeks old); cardiovascular; Bp measured using tail cuff; Dose (0.75 µg/kg/hr);



**Q6339:** S. B. Poulsen and B. M. Christensen. Long-term aldosterone administration increases renal Na<sup>(+)</sup>-Cl<sup>(-)</sup> cotransporter abundance in late distal convoluted tubule. *Am J Physiol Renal Physiol* 2017;313(3):F756-F766

**ALZET Comments:** Aldosterone; DMSO; Saline; SC; Mice; 1007D; 6 days; Dose (100 ug/kg/24 h); 5% DMSO used; Controls received mp w/ vehicle; animal info (Male mice C57BL/6JBomTac);.

**Q6449:** Y. Kato, K. Mori, M. Kasahara, K. Osaki, A. Ishii, K. P. Mori, N. Toda, S. Ohno, T. Kuwabara, T. Tokudome, I. Kishimoto, M. A. Saleem, T. Matsusaka, K. Nakao, M. Mukoyama, M. Yanagita and H. Yokoi. Natriuretic peptide receptor guanylyl cyclase-A pathway counteracts glomerular injury evoked by aldosterone through p38 mitogen-activated protein kinase inhibition. *Sci Rep* 2017;7(46624)

**ALZET Comments:** Aldosterone; SC; Mice (knockout); 2004; Dose (0.2 μ g/kg body weight per minute); Controls received mp w/ vehicle; animal info (Male systemic GC-A KO mice and wild-type); replacement therapy (left uninephrectomy);.

**Q6469:** Y. Guo, X. Deng, S. Chen, L. Yang, J. Ni, R. Wang, J. Lin, M. Bai, Z. Jia, S. Huang and A. Zhang. MicroRNA-30e targets BNIP3L to protect against aldosterone-induced podocyte apoptosis and mitochondrial dysfunction. *Am J Physiol Renal Physiol* 2017;312(4):F589-F598

**ALZET Comments:** Aldosterone; SC; Mice; 7 days; Dose (0.5 mg/h); Controls received mp w/ vehicle; animal info (8-wk-old C57BL/6J male mice weighing 20–25 g);.

**Q6419:** J. P. Ball, M. Syed, R. O. Maranon, M. E. Hall, R. Kc, J. F. Reckelhoff, L. L. Yanes Cardozo and D. G. Romero. Role and Regulation of MicroRNAs in Aldosterone-Mediated Cardiac Injury and Dysfunction in Male Rats. *Endocrinology* 2017;158(6):1859-1874

**ALZET Comments:** Aldosterone; PEG 300; SC; Rat; 2004; 8 weeks; Dose (0.75 mg/h); Controls received mp w/ vehicle; animal info (Eight-week old male Sprague–Dawley rats); replacement therapy (uninephrectomy); cardiovascular;.

**Q6421:** M. Bai, Y. Chen, M. Zhao, Y. Zhang, J. C. He, S. Huang, Z. Jia and A. Zhang. NLRP3 inflammasome activation contributes to aldosterone-induced podocyte injury. *Am J Physiol Renal Physiol* 2017;312(4):F556-F564

**ALZET Comments:** Aldosterone; SC; Mice; 2 weeks; Controls received mp w/ vehicle; animal info (8-wk-old male mice weighing 25–30 g);.

**Q5084:** B. Wang, X. Xu, X. He, Z. Wang and M. Yang. Berberine Improved Aldo-Induced Podocyte Injury via Inhibiting Oxidative Stress and Endoplasmic Reticulum Stress Pathways both In Vivo and In Vitro. *Cell Physiol Biochem* 2016;39(1):217-28

**ALZET Comments:** Aldosterone; SC; Rat; 2004; 4 weeks; Controls received no mp; animal info (male, Sprague Dawley, 5-6 weeks old, 260-290g); functionality of mp verified by measuring urinary aldosterone levels (pg 220); cardiovascular; bp measured using tail cuff; Dose (0.75 ug/hr);.

**Q5471:** M. Valero-Munoz, S. Li, R. M. Wilson, B. Boldbaatar, M. Iglarz and F. Sam. Dual Endothelin-A/Endothelin-B Receptor Blockade and Cardiac Remodeling in Heart Failure With Preserved Ejection Fraction. *Circ Heart Fail* 2016;9(11):

**ALZET Comments:** Aldosterone, D-; Mice; 4 weeks; Controls received mp w/ saline; animal info (Male, C57BL6J, 8 weeks old, 20-25g); no stress (see pg. 3); replacement therapy (uniphrectomy); cardiovascular; Dose (30 ug/h);.

**Q4889:** A. S. Terker, C. Zhang, K. J. Erspamer, G. Gamba, C.-L. Yang and D. H. Ellison. Unique chloride-sensing properties of WNK4

permit the distal nephron to modulate potassium homeostasis. *Kidney Int* 2016;89(127-134)

**ALZET Comments:** Aldosterone; Saline; SC; Mice; 1002; 7 days; Controls received mp w/ vehicle; animal info (C57BL6 WT or BALB/c, 12-24 weeks old); 240 ug/kr/day.

**Q6510:** A. S. Terker, B. Yarbrough, M. Z. Ferdaus, R. A. Lazelle, K. J. Erspamer, N. P. Meermeier, H. J. Park, J. A. McCormick, C. L. Yang and D. H. Ellison. Direct and Indirect Mineralocorticoid Effects Determine Distal Salt Transport. *J Am Soc Nephrol* 2016;27(8):2436-45



**ALZET Comments:** Aldosterone; Saline; Mice (knockout); 7 days; Dose (240 ug/kg/day); animal info (Kidney--specific MR knockout mice, 12-24 weeks old);.

**Q5686:** A. Tanino, T. Okura, T. Nagao, M. Kukida, Z. Pei, D. Enomoto, K. Miyoshi, H. Okamura and J. Higaki. Interleukin-18 deficiency protects against renal interstitial fibrosis in aldosterone/salt-treated mice. *Clin Sci (Lond)* 2016;130(19):1727-39

**ALZET Comments:** Aldosterone; Water; ethanol; propylene glycol; SC; mice; 2004; 4 weeks; 28 days; Controls received mp w/ vehicle; animal info (male, C57BL6 or IL-18 KO, 8 weeks old); 9% ethanol used; 86.5% propylene glycol used; replacement therapy (uniphrectomy); immunology; Bp measured using indirect tail cuff; Dose (0.15 ug/h);.

**Q5201:** H. Shi, A. Zhang, Y. He, M. Yang and W. Gan. Effects of p53 on aldosterone-induced mesangial cell apoptosis in vivo and in vitro. *Mol Med Rep* 2016;13(6):5102-8

**ALZET Comments:** Aldosterone; Saline; SC; Rat; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 260-290g); cardiovascular; bp measured using tail cuff; Dose (0.75 ug/h);.

**Q5200:** L. Sheng, M. Yang, W. Ding, M. Zhang, J. Niu, Z. Qiao and Y. Gu. Epidermal growth factor receptor signaling mediates aldosterone-induced profibrotic responses in kidney. *Exp Cell Res* 2016;346(1):99-110

**ALZET Comments:** Aldosterone; Ethanol; SC; Rat; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 5 weeks old, 18-200g); cardiovascular; Dose (0.75 ug/hr);.

**Q5191:** T. Sakamoto, A. Fujii, N. Saito, H. Kondo and A. Ohuchi. Alteration of amiloride-sensitive salt taste nerve responses in aldosterone/NaCl-induced hypertensive rats. *Neurosci Res* 2016;108(60-6

**ALZET Comments:** Aldosterone; Ethanol; propylene glycol; water; SC; Rat; 2006; 5 weeks; Controls received mp w/ vehicle; animal info (male, Sprague Dalwey, 4 week old, 130-150g); 9% ethanol used; 87% propylene glycol; cardiovascular; bp measured using tail cuff; Dose (0.75 ug/h);.

**Q5969:** J. C. Reil, M. Tauchnitz, Q. Tian, M. Hohl, D. Linz, M. Oberhofer, L. Kaestner, G. H. Reil, H. Thiele, P. Steendijk, M. Bohm, H. R. Neuberger and P. Lipp. Hyperaldosteronism induces left atrial systolic and diastolic dysfunction. *Am J Physiol Heart Circ Physiol* 2016;311(4):H1014-H1023

**ALZET Comments:** Aldosterone; SC; Rat; 2ML4; 8 weeks; Controls received no minipump; animal info (8 weeks old); cardiovascular; Therapeutic indication (Hypertension, stroke, thromboembolism); Dose (1.5 ug/h);.

**Q6628:** H. Nakagawa, S. Somekawa, K. Onoue, T. Kumazawa, T. Ueda, A. Seno, Y. Nakada, T. Nakano, M. Matsui, T. Soeda, S. Okayama, R. Kawakami, H. Kawata, H. Okura and Y. Saito. Salt accelerates aldosterone-induced cardiac remodeling in the absence of guanylyl cyclase-A signaling. *Life Sci* 2016;165(9-15

**ALZET Comments:** Aldosterone; SC; Mice (knockout); 4 weeks; Dose (100 ng/kg/min); Controls received mp w/ vehicle; animal info (Male 12-week-old GC-A KO mice and their WT littermates); cardiovascular;.

**Q4896:** P. S. L. María Valero-Muñoz, BS; Richard M. Wilson, BS; Maarten Hulsmans, PhD; P. J. J. F. Tamar Aprahamian, PhD; Matthias Nahrendorf, MD, PhD; and P. F. S. Philipp E. Scherer, MD. Heart Failure With Preserved Ejection Fraction Induces Beiging in Adipose Tissue. *Circ Heart Fail* 2016;9(1-10

**ALZET Comments:** Aldosterone, D-; Saline; SC; Mice; 4 weeks; Controls received mp w/ saline; animal info (C57BL6, 8 weeks old, 20-25g, uninephrectomy); replacement therapy (uninephrectomy); cardiovascular; bp measured using tail cuff; Dose (0.3 ug/h);.

**Q6567:** Y. Kakizoe, Y. Miyasato, T. Onoue, T. Nakagawa, M. Hayata, K. Uchimura, J. Morinaga, T. Mizumoto, M. Adachi, T. Miyoshi, Y. Sakai, K. Tomita, M. Mukoyama and K. Kitamura. A serine protease inhibitor attenuates aldosterone-induced kidney injuries via the suppression of plasmin activity. *J Pharmacol Sci* 2016;132(2):145-153

**ALZET Comments:** Aldosterone; DMSO; Saline; SC; Rat; 2004; animal info (9 week old male SpragueDawley rats); replacement therapy (left uninephrectomy);.

**Q4899:** y. B. S. H. H.-W. WANG, y A. CHEN, M. AHMAD, and R. A. W. A. F. H. H. LEENEN. ROLE OF BRAIN ALDOSTERONE AND MINERALOCORTICOID



RECEPTORS IN ALDOSTERONE-SALT HYPERTENSION IN RATS. *Neuroscience* 2016;314(90-105

**ALZET Comments:** Aldosterone; eplerenone; FAD286; CSF, artificial; acetonitrile; SC; CSF/CNS; Rat; 2004; 2 weeks, 3 weeks; Controls received mp w/ vehicle; animal info (male, Wistar, 200-250g); 4% acetonitrile used; Multiple pumps per animal; cardiovascular; bp measured using radiotelemetry; bp measured using radiotelemetry; dose (1.5 and 7.5 ug/kg/hr Aldosterone, 5ug/day Eplerenone, 25 ug/day FAD286).

**Q5346:** R. D. Feldman, Q. Ding, Y. Hussain, L. E. Limbird, J. G. Pickering and R. Gros. Aldosterone mediates metastatic spread of renal cancer via the G protein-coupled estrogen receptor (GPER). *FASEB J* 2016;30(6):2086-96

**ALZET Comments:** Aldosterone; G protein-coupled estrogen receptor 15 antagonist; SC; Mice; 1004; 2 weeks; Controls received mp w/ vehicle; animal info (BALB/c male mice, 2 month old); cancer (Orthotopic renal cancer); dose-response (pg. 2093); Dose (200 ug/kg/day for both);.

**Q6110:** T. Bruder-Nascimento, N. S. Ferreira, C. Z. Zanotto, F. Ramalho, I. O. Pequeno, V. C. Olivon, K. B. Neves, R. Alves-Lopes, E. Campos, C. A. Silva, R. Fazan, D. Carlos, F. L. Mestriner, D. Prado, F. V. Pereira, T. Braga, J. P. Luiz, S. B. Cau, P. C. Elias, A. C. Moreira, N. O. Camara, D. S. Zamboni, J. C. Alves-Filho and R. C. Tostes. NLRP3 Inflammasome Mediates Aldosterone-Induced Vascular Damage. *Circulation* 2016;134(23):1866-1880

**ALZET Comments:** Aldosterone; Mice; 14 days; Dose (600 µg/kg/d); Controls received mp w/ vehicle; animal info (8-10 week old male wild type, NLRP3 knockout, caspase-1 knockout, and interleukin-1 receptor knockout mice); cardiovascular;.

**Q6530:** Bin Wang, Wei Ding, Minmin Zhang, Hongmei Li, Honglei Guo, Lili Lin, Jing Chen and Y. Gu. Role of FOXO1 in aldosterone-induced autophagy: A compensatory protective mechanism related to podocyte injury. *ONCOTARGET* 2016;7(29):45331-45351

**ALZET Comments:** Aldosterone; SC; Rat; 2004; 28 days; Dose (0.75 µg/kg/min); animal info (5-6 week old male Sprague-Dawley rats weighing 190 g); replacement therapy (uniphrectomy);.

**Q4681:** Y. Zhang, S. C. Robson, K. L. Morris, K. M. Heiney, K. M. Dwyer, B. K. Kishore, C. M. Ecelbarger and B. K. Kishore. Impaired natriuretic response to high-NaCl diet plus aldosterone infusion in mice overexpressing human CD39, an ectonucleotidase (NTPDase1). *AMERICAN JOURNAL OF PHYSIOLOGY-RENAL PHYSIOLOGY* 2015;308(F1398-F1408

**ALZET Comments:** Aldosterone; SC; Mice; 1002; 8 days; Animal info (hCD39, 2-4 months old);.

**Q4159:** B. Wang, W. Ding, M. M. Zhang, H. M. Li, Y. Gu and Y. Gu. Rapamycin Attenuates Aldosterone-Induced Tubulointerstitial Inflammation and Fibrosis. *CELLULAR PHYSIOLOGY AND BIOCHEMISTRY* 2015;35(116-125

**ALZET Comments:** Aldosterone; SC; Rat; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (Sprague Dawley); replacement therapy (uninephrectomized); cardiovascular;.

**Q4615:** R. L. Thunhorst, B. J. Xue, T. G. Beltz, A. K. Johnson and R. L. Thunhorst. Age-related changes in thirst, salt appetite, and arterial blood pressure in response to aldosterone-dexamethasone combination in rats. *AMERICAN JOURNAL OF PHYSIOLOGY-REGULATORY INTEGRATIVE AND COMPARATIVE PHYSIOLOGY* 2015;308(R807-R815

**ALZET Comments:** Aldosterone; dexamethasone; SC; Rat; 2002; 10 days; Animal info (male, Brown Norway, 3 or 11 or 28-29 months old); cardiovascular; for combined treatment, drugs delivered in same minipump; bp measured using radiotelemetry (DSI);.

**Q2669:** T. Suehiro, K. Tsuruya, H. Ikeda, J. Toyonaga, S. Yamada, H. Noguchi, M. Tokumoto and T. Kitazono. Systemic Aldosterone, But Not Angiotensin II, Plays a Pivotal Role in the Pathogenesis of Renal Injury in Chronic Nitric Oxide-Deficient Male Rats. *Endocrinology* 2015;156(7):2657-66

**ALZET Comments:** Aldosterone; SC; Rat; 8 weeks; Dose (40 ug/kg/d); animal info (Male Wistar rats aged 10 wk); functionality of mp verified by aldosterone serum levels; pumps replaced every 2 weeks;.

**Q4574:** H. Sawada, Y. Naito, M. Oboshi, T. Iwasaku, Y. Okuhara, D. Morisawa, A. Eguchi, S. Hirotsu, T. Masuyama and Y. Naito. Iron restriction inhibits renal injury in aldosterone/salt-induced hypertensive mice. *HYPERTENSION RESEARCH* 2015;38(317-322



**ALZET Comments:** Aldosterone; SC; Mice; 4 weeks; Controls received mp w/ vehicle; animal info (male, C57BL6J, 8 weeks old, 20-23g); replacement therapy (uninephrectomy); cardiovascular; bp measured using tail cuff;.

**Q4526:** E. Martinez-Martinez, V. Cachofeiro, E. Rousseau, V. Alvarez, L. Calvier, A. Fernandez-Celis, C. Leroy, M. Miana, R. Jurado-Lopez, A. M. Briones, F. Jaisser, F. Zannad, P. Rossignol, N. Lopez-Andres and N. Lopez-Andres. Interleukin-33/ST2 system attenuates aldosterone-induced adipogenesis and inflammation. *MOLECULAR AND CELLULAR ENDOCRINOLOGY* 2015;411(20-27

**ALZET Comments:** Aldosterone; NaCl; ethanol; Mice; 3 weeks; Controls received mp w/ vehicle; animal info (male, C57BL6, adult); 5% ethanol used; functionality of mp verified by plasma levels; cardiovascular; bp measured by tail cuff; 1 mg/kg/day.

**Q5228:** Y. Lv, S. Bai, H. Zhang, H. Zhang, J. Meng, L. Li and Y. Xu. Aldosterone down-regulates the slowly activated delayed rectifier potassium current in adult guinea pig cardiomyocytes. *British Journal of Pharmacology* 2015;172(23):

**ALZET Comments:** Aldosterone; PEG 400; SC; Guinea pig; 2004; 28 days; Controls received mp w/ vehicle; animal info: Male adult guinea pigs weighing 200–250 g; functionality of mp verified by recording action potentials in papillary muscles and IKs in ventricular cardiomyocytes; cardiovascular; ECG used for electrophysiological recordings; Dose: 1 ug/hr.

**Q4459:** D. Ichikawa, A. Kamijo-Ikemori, T. Sugaya, Y. Shibagaki, T. Yasuda, S. Hoshino, K. Katayama, J. Igarashi-Migitaka, K. Hirata, K. Kimura and A. Kamijo-Ikemori. Human liver-type fatty acid-binding protein protects against tubulointerstitial injury in aldosterone-induced renal injury. *AMERICAN JOURNAL OF PHYSIOLOGY-RENAL PHYSIOLOGY* 2015;308(F114-F121

**ALZET Comments:** Aldosterone; PEG 300; SC; Mice; 1004; 28 days; Controls received mp w/ vehicle; animal info (male, hL-FABP Tg-Aldo, 8-10 weeks old, 27.5g); cardiovascular; bp measured using tail-cuff; dose: 0.125 ug/kg/min.

**Q3910:** B. Gravez, A. Tarjus, V. Pelloux, A. Ouvrard-Pascaud, C. Delcayre, J. Samuel, K. Clement, N. Farman, F. Jaisser, S. Messaoudi and S. Messaoudi. Aldosterone Promotes Cardiac Endothelial Cell Proliferation In Vivo. *JOURNAL OF THE AMERICAN HEART ASSOCIATION* 2015;4(U351-U365

**ALZET Comments:** Aldosterone; Ethanol; saline; Mice; 1 week; 4 weeks; Controls received mp w/ vehicle; animal info (male, B6D2, 4 months old); functionality of mp verified by plasma levels; 10% ethanol used; cardiovascular; bp measured using tail cuff;.

**Q4507:** W. Ding, C. Y. Xu, B. Wang, M. M. Zhang and M. M. Zhang. Rotenone Attenuates Renal Injury in Aldosterone-Infused Rats by Inhibiting Oxidative Stress, Mitochondrial Dysfunction, and Inflammasome Activation. *MEDICAL SCIENCE MONITOR* 2015;21(U1-U8

**ALZET Comments:** Aldosterone; Ethanol; SC; Rat; 2004; Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 220-250g); 0.5% ethanol used; replacement therapy (uninephrectomy); cardiovascular; immunology;.

**Q5125:** S. Bernardi, B. Toffoli, C. Zennaro, F. Bossi, P. Losurdo, A. Michelli, R. Carretta, P. Mulatero, F. Fallo, F. Veglio and B. Fabris. Aldosterone effects on glomerular structure and function. *J Renin Angiotensin Aldosterone Syst* 2015;16(4):730-8

**ALZET Comments:** Aldosterone; Eplerenone; NaCl; SC; Rat; 2004; 2ML4; 4 weeks; Controls received mp w/ vehicle, Harlan Teklad 18% Protein Global Diet; animal info: wild-type male Wistar rats, weighing 250 g; functionality of mp verified by: systolic blood pressure (SBP) via tail cuff plethysmography; post op. care (buprenorphine); injected SC 0.05 mg/kg day of; 0.025 mg/kg day after; cardiovascular; cardiovascular; Dose: aldosterone -- 72 µg/kg/day; eplerenone -- 100 mg/kg/day.

**Q3726:** X. L. Zhang, J. Liu, X. M. Pang, J. J. Zhao, S. Y. Wang, D. Wu and J. Liu. Aldosterone induces C-reactive protein expression via MR-ROS-MAPK-NF-kappaB signal pathway in rat vascular smooth muscle cells. *MOLECULAR AND CELLULAR ENDOCRINOLOGY* 2014;395(61-68

**ALZET Comments:** Aldosterone; PEG 400; SC; Rat; 2004; 4 weeks; Control animals received mp w/ vehicle; animal info (male, Sprague Dawley, 180-220 g).

**Q4201:** M. Yang, B. Wang, M. Li, B. Jiang and M. Yang. Connexin 43 is Involved in Aldosterone-Induced Podocyte Injury. *CELLULAR PHYSIOLOGY AND BIOCHEMISTRY* 2014;34(1652-1662



**ALZET Comments:** Aldosterone; SC; Rat; 2004; 4 weeks; Controls received no mp; animal info (male, Sprague Dawley, 260-290g); cardiovascular; bp measured using tail cuff;.

**Q5445:** C. Xu, W. Ding, L. Yang, M. Yang, M. Zhang and Y. Gu. Contributions of endoplasmic reticulum stress and reactive oxygen species to renal injury in aldosterone/salt-induced rats. *Nephron Exp Nephrol* 2014;126(1):25-32

**ALZET Comments:** Aldosterone; Ethanol; water; SC; Rat; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (Sprague-Dawley rats, aged 5 weeks); functionality of mp verified by biological parameters; .5% XXX used; dose-response (pg 27); Renal injury model; Dose (0.75ug/hr);.

**Q5456:** Y. B. Wang, V. Leroy, A. B. Maunsbach, A. Doucet, U. Hasler, E. Dizin, T. Hernandez, S. de Seigneux, P. Y. Martin and E. Feraille. Sodium transport is modulated by p38 kinase-dependent cross-talk between ENaC and Na,K-ATPase in collecting duct principal cells. *J Am Soc Nephrol* 2014;25(2):250-9

**ALZET Comments:** Aldosterone; Saline; DMSO; SC; Rat; 2001; 7 days; animal info (male Sprague-Dawley rats (150–200 g)); 30% DMSO used;.

**Q4130:** K. Tanaka, R. M. Wilson, E. E. Essick, J. L. Duffen, P. E. Scherer, N. Ouchi, F. Sam and F. Sam. Effects of Adiponectin on Calcium-Handling Proteins in Heart Failure With Preserved Ejection Fraction. *Circulation-Heart Failure* 2014;7(976-U166)

**ALZET Comments:** Aldosterone, D-; IP; Mice; 4 weeks; Controls received mp w/ saline; animal info (APNTG, 12 weeks old); cardiovascular; peptides; bp measured using tail cuff;.

**Q3569:** M. L. Rock, A. Z. Karas, K. B. G. Rodriguez, M. S. Gallo, K. Pritchett-Corning, R. H. Karas, M. Aronovitz and B. N. Gaskill. The Time-to-Integrate-to-Nest Test as an Indicator of Wellbeing in Laboratory Mice. *Journal of the American Association for Laboratory Animal Science* 2014;53(1):24-28

**ALZET Comments:** Aldosterone; uridine, bromodeoxy-; Ethanol; saline; SC; Mice; 5 days; Controls received mp w/ vehicle; animal info (10 mouse strains; BALB/cAnNCrI, 129S2/SvPasCrI, FVB/NCrI, C57BL/6NCrI, C3H/HeNCrI, CB17/Icr-Prkdcscid/IcrIcoCrI, NOD.CB17-Prkdcscid/NCrCrI, CB17.Cg/Prkdcscid Lystbg/CrI, C57BL/6NTac, and C57BL/6NJ, carotid artery injury); 11% ethanol used; Multiple pumps per animal (2); post op. care (buprenorphine 0.05 mg/kg SC); behavioral testing (nesting behavior); cardiovascular;.

**Q5599:** M. L. Rock. The time-to-integrate-to-nest test as an indicator of wellbeing in laboratory mice. *Journal of American Association of Laboratory Animal Science* 2014;53(1):24-28

**ALZET Comments:** Aldosterone; bromodeoxyuridine; Ethanol; SC; Mice; 3 days; 11% ethanol used; Multiple pumps per animal (2): one for aldosterone and one for BrdU; no stress: Minipump implantation surgery did not appear to affect TINT results, yet mice were more likely to fail the TINT the morning after CAI surgery. Mice required 2 full days to return to baseline TINT levels. This lag may be due to the fact that minipump implantation surgery is adequately treated with a single dose of buprenorphine whereas CAI surgery is not (see pg. 27); post op. care: Buprenorphine (0.05 mg/kg SC); Dose: Aldosterone (6 g/kg/d;), BrdU (25 mg/kg/d);.

**Q4056:** N. Queisser, P. I. Oteiza, S. Link, V. Hey, H. Stopper, N. Schupp and N. Queisser. Aldosterone Activates Transcription Factor Nrf2 in Kidney Cells Both In Vitro and In Vivo. *ANTIOXIDANTS & REDOX SIGNALING* 2014;21(2126-2142)

**ALZET Comments:** Aldosterone; Rat; 2ML4; 4 weeks; Controls received mp w/ PBS; animal info (male, Sprague Dawley, 5-6 weeks); cardiovascular;.

**Q4055:** N. Queisser, K. Happ, S. Link, D. Jahn, A. Zimnol, A. Geier, N. Schupp and N. Schupp. Aldosterone induces fibrosis, oxidative stress and DNA damage in livers of male rats independent of blood pressure changes. *TOXICOLOGY AND APPLIED PHARMACOLOGY* 2014;280(399-407)

**ALZET Comments:** Aldosterone; Rat; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (male, Sprague Dawley RjHan:SD, 5-6 weeks old); toxicology; cardiovascular; bp measured using tail cuff;.

**Q3719:** M. Ohsawa, K. Tamura, H. Wakui, A. Maeda, T. Dejima, T. Kanaoka, K. Azushima, K. Uneda, Y. Tsurumi-Ikeya, R. Kobayashi, M. Matsuda, S. Uchida, Y. Toya, H. Kobori, A. Nishiyama, A. Yamashita, Y. Ishikawa, S. Umemura and K. Tamura.



Deletion of the angiotensin II type 1 receptor-associated protein enhances renal sodium reabsorption and exacerbates angiotensin II-mediated hypertension. *Kidney International* 2014;86(570-581

**ALZET Comments:** Angiotensin II; aldosterone; SC; Mice; 2002; 14 days; animal info (male, 11 wks old, ATRAP-KO, wt); peptides; blood pressure measured via radiotelemetry.

**Q3398:** M. M. Kreuzer, L. H. Lehmann, J. H. Riffel, M. Haass, C. Maser-Gluth, J. Backs, H. A. Katus, S. J. Buss and M. M. Kreuzer. Aldosterone augments Na(+)-induced reduction of cardiac norepinephrine reuptake. *American Journal of Physiology-Heart and Circulatory Physiology* 2014;307(H1169-H1177

**ALZET Comments:** Aldosterone; Saline; SC; Rat; 2004; 28 days; Control animals received mp w/ vehicle; animal info (male, Wistar).

**Q4727:** B. Koneru, C. S. Bathina, B. H. Cherry and S. W. Mifflin. Mineralocorticoid receptor in the NTS stimulates saline intake during fourth ventricular infusions of aldosterone. *AMERICAN JOURNAL OF PHYSIOLOGY-REGULATORY INTEGRATIVE AND COMPARATIVE PHYSIOLOGY* 2014;306(1):R61-R66

**ALZET Comments:** Aldosterone; CSF, artificial; CSF/CNS (fourth ventricle); Rat; 2004; 28 days; Animal info (Wistar-Kyoto, 275g); tissue perfusion (fourth ventricle); cardiovascular;.

**Q3214:** T. Hattori, T. Murase, Y. Sugiura, K. Nagasawa, K. Takahashi, M. Ohtake, M. Ohtake, M. Miyachi, T. Murohara and K. Nagata. Effects of salt status and blockade of mineralocorticoid receptors on aldosterone-induced cardiac injury. *HYPERTENSION RESEARCH* 2014;37(2):125-133

**ALZET Comments:** Aldosterone, d-; Saline; ethanol; SC; Rat; 2004; 4 weeks; Animal info (Sprague Dawley, uninephrectomized, 6 wks old, male, inbred); replacement therapy (uninephrectomy); 0.5% ethanol used.

**Q3459:** T. Doi, S. Doi, A. Nakashima, T. Ueno, Y. Yokoyama, N. Kohno, T. Masaki and T. Masaki. Mizoribine Ameliorates Renal Injury and Hypertension along with the Attenuation of Renal Caspase-1 Expression in Aldosterone-Salt-Treated Rats. *PLoS One* 2014;9(U875-U881

**ALZET Comments:** Aldosterone; SC; Rat; 6 weeks; Controls received mp w/ vehicle; animal info (male, Sprague Dawley, 220-250g, 6 weeks old); functionality of mp verified by increased bp; replacement therapy (uninephrectomy); immunology; bp measured using tail cuff; long-term study;.

**Q4713:** S. C. Clayton, Z. M. Zhang, T. Beltz, B. J. Xue, A. K. Johnson and A. K. Johnson. CNS neuroplasticity and salt-sensitive hypertension induced by prior treatment with subpressor doses of ANG II or aldosterone 1523. *AMERICAN JOURNAL OF PHYSIOLOGY-REGULATORY INTEGRATIVE AND COMPARATIVE PHYSIOLOGY* 2014;306(R908-R917

**ALZET Comments:** Angiotensin II; aldosterone; CSF, artificial; SC; CSF/CNS; Rat; 2001; 1 week;

**Q3839:** S. Chrissobolis, G. R. Drummond, F. M. Faraci, C. G. Sobey and S. Chrissobolis. Chronic aldosterone administration causes Nox2-mediated increases in reactive oxygen species production and endothelial dysfunction in the cerebral circulation. *Journal of Hypertension* 2014;32(1815-1821

**ALZET Comments:** Aldosterone; Propylene glycol; ethanol; water; SC; Mice; 1004; 14 days; Controls received mp w/ vehicle; animal info (male, Nox2-/- or WT, 25 weeks or 70 weeks); functionality of mp verified by plasma levels; 9% ethanol used; 87% propylene glycol used; cardiovascular; bp measured using tail cuff;.

**Q3435:** M. U. Cheema, H. H. Damkier, J. Nielsen, E. T. Poulsen, J. J. Enghild, R. A. Fenton, J. Praetorius and J. Praetorius. Distal Renal Tubules Are Deficient in Aggresome Formation and Autophagy upon Aldosterone Administration. *PLoS One* 2014;9(U303-U315

**ALZET Comments:** Aldosterone; SC; Rat; 7 days; Animal info (male, Wistar); functionality of mp verified by blood plasma levels; immunology;.

**Q3218:** M. Zeniya, E. Sohara, S. Kita, T. Iwamoto, K. Susa, T. Mori, K. Oi, M. Chiga, D. Takahashi, S. S. Yang, S. H. Lin, T. Rai, S. Sasaki and S. Uchida. Dietary Salt Intake Regulates WNK3-SPAK-NKCC1 Phosphorylation Cascade in Mouse Aorta Through Angiotensin II. *Hypertension* 2013;62(5):872-878



**ALZET Comments:** Valsartan; angiotensin II; aldosterone; IP; Mice; Animal info (C57BL/6J. male); peptides.

**Q3014:** B. J. Xue, Z. M. Zhang, T. G. Beltz, R. F. Johnson, F. Guo, M. Hay and A. K. Johnson. Estrogen Receptor-beta in the Paraventricular Nucleus and Rostrolateral Medulla Plays an Essential Protective Role in Aldosterone/Salt-Induced Hypertension in Female Rats. *Hypertension* 2013;61(6):1255-U261

**ALZET Comments:** Propyl pyrazole triol; diarylpropionitrile; aldosterone; DMSO; saline; CSF/CNS; Rat; 2004; 21 days; Cardiovascular; animal info (Sprague-Dawley, female, 10-12 wks old); DPN - selective ER $\beta$  agonist, diaryl propionitrile, PPT-selective ER $\alpha$  agonist propyl-pyrazole-triol; 10% DMSO used.

**Q3159:** S. A. Salyer, J. Parks, M. T. Barati, E. D. Lederer, B. J. Clark, J. D. Klein and S. J. Khundmiri. Aldosterone regulates Na<sup>+</sup>, K<sup>+</sup> ATPase activity in human renal proximal tubule cells through mineralocorticoid receptor. *BIOCHIMICA ET BIOPHYSICA ACTA-MOLECULAR CELL RESEARCH* 2013;1833(10):2143-2152

**ALZET Comments:** Aldosterone; Rat; 14 days; Controls received mp with vehicle or sham operated; animal info (male, Sprague Dawley, 100-150g); replacement therapy (adrenalectomy); immunology;.

**Q2473:** C. Ronzaud, D. Loffing-Cueni, P. Hausel, A. Debonneville, S. R. Malsure, N. Fowler-Jaeger, N. A. Boase, R. Perrier, M. Maillard, B. L. Yang, J. B. Stokes, R. Koesters, S. Kumar, E. Hummler, J. Loffing and O. Staub. Renal tubular NEDD4-2 deficiency causes NCC-mediated salt-dependent hypertension. *Journal of Clinical Investigation* 2013;123(2):657-665

**ALZET Comments:** Aldosterone; SC; Mice; 1003D; 3 days; Control animals received mp w/ vehicle; animal info (Nedd4L Pax8/LC1 KO).

**Q2600:** N. Queisser, K. Amann, V. Hey, S. L. Habib and N. Schupp. Blood pressure has only minor influence on aldosterone-induced oxidative stress and DNA damage in vivo. *Free Radical Biology and Medicine* 2013;54(1):17-25

**ALZET Comments:** Aldosterone; NaCl; Rat; 2ML4; 4 weeks; Control animals received mp w/ vehicle; animal info (Sprague Dawley, male, 5-6 wks old).

**Q2508:** A. B. Patel, G. Frindt and L. G. Palmer. Feedback inhibition of ENaC during acute sodium loading in vivo. *American Journal of Physiology-Renal Physiology* 2013;304(2):F222-F232

**ALZET Comments:** Aldosterone; amiloride; PEG 300; SC; Rat; 2002; 2 days; Animal info (Sprague Dawley, female, wks old, 200-300 g).

**Q2860:** E. Nitta, K. Hirooka, K. Tenkumo, T. Fujita, A. Nishiyama, T. Nakamura, T. Itano and F. Shiraga. Aldosterone: a mediator of retinal ganglion cell death and the potential role in the pathogenesis in normal-tension glaucoma. *Cell Death & Disease* 2013;4(1):U109-U114

**ALZET Comments:** Aldosterone; DMSO; SC; Rat; 2006; 6 weeks; Control animals received mp w/ vehicle; animal info (Sprague Dawley, male, 200-250 g); up to 5% DMSO used; long-term study;.

**Q2609:** S. Messaoudi, B. Gravez, A. Tarjus, V. Pelloux, A. Ouvrard-Pascaud, C. Delcayre, J. Samuel, J. M. Launay, C. Sierra-Ramos, D. A. de la Rosa, K. Clement, N. Farman and F. Jaisser. Aldosterone-Specific Activation of Cardiomyocyte Mineralocorticoid Receptor In Vivo. *Hypertension* 2013;61(2):361-U305

**ALZET Comments:** Aldosterone; Mice; 1 week; Animal info (MR Cardio, 4 mo old, males).

**Q2795:** A. P. McGraw, J. Bagley, W. S. Chen, C. Galayda, H. Nickerson, A. Armani, M. Caprio, P. Carmeliet and I. Z. Jaffe. Aldosterone Increases Early Atherosclerosis and Promotes Plaque Inflammation Through a Placental Growth Factor-Dependent Mechanism. *JOURNAL OF THE AMERICAN HEART ASSOCIATION* 2013;2(1):U658-U670

**ALZET Comments:** Aldosterone; Saline; ethanol; Mice; 1004; 8 weeks; Control animals received mp w/ vehicle; animal info (ApoE -/-, PIGF +/-, ApoE +/-, PIGF -/-, 9 wks old); post op care (buprenorphine); pumps replaced after 4 weeks; long-term study.

**Q2800:** H. Kusunoki, Y. Taniyama, H. Rakugi and R. Morishita. Cardiac and Renal Protective Effects of Irbesartan via Peroxisome Proliferator-Activated Receptor $\gamma$ -Hepatocyte Growth Factor Pathway Independent of Angiotensin II Type





1a Receptor Blockade in Mouse Model of Salt-Sensitive Hypertension. JOURNAL OF THE AMERICAN HEART ASSOCIATION 2013;2(2):U262-U273

**ALZET Comments:** Aldosterone; SC; Mice; 1002; 4 weeks; Animal info (8 wks old, AT1aRKO).

**Q2826:** B. Ko, A. C. Mistry, L. Hanson, R. Mallick, B. M. Wynne, T. L. Thai, J. L. Bailey, J. D. Klein and R. S. Hoover. Aldosterone acutely stimulates NCC activity via a SPAK-mediated pathway. American Journal of Physiology-Renal Physiology 2013;305(5):F645-F652

**ALZET Comments:** Aldosterone; DMSO; SC; Rat; 24 hours; Control animals received mp w/ vehicle; animal info (Sprague Dawley, male, 235-270 g); 25% DMSO used.

**Q2867:** H. M. Jin, D. C. Zhou, H. F. Gu, Q. Y. Qiao, S. K. Fu, X. L. Liu and Y. Pan. Antioxidant N-Acetylcysteine Protects Pancreatic beta-Cells Against Aldosterone-Induced Oxidative Stress and Apoptosis in Female db/db Mice and Insulin-Producing MIN6 Cells. Endocrinology 2013;154(11):4068-4077

**ALZET Comments:** Aldosterone; SC; Mice; 2ML4; 56 days; Animal info (C57BLKS/J, db/db, female, 8 wks old); diabetes;.

**Q2514:** S. Formenti, M. Bassi, N. B. Nakamura, G. H. M. Schoorlemmer, J. V. Menani and E. Colombari. Hindbrain mineralocorticoid mechanisms on sodium appetite. American Journal of Physiology-Regulatory Integrative and Comparative Physiology 2013;304(3):R252-R259

**ALZET Comments:** Aldosterone; Saline; ethanol; CSF/CNS; CSF/CNS (fourth ventricle); Rat; 2001; 7 days; Control animals received mp w/ vehicle; animal info (Wistar Hannover, male, 280-350 g); guide cannula used; infusion rate incorrectly listed as 2 ul/hr; 1% ethanol used; dose response (table 1);.

**Q5954:** T. Dartsch, R. Fischer, A. Gapelyuk, M. Weiergraeber, D. Ladage, T. Schneider, A. Schirdewan, H. Reuter, J. Mueller-Ehmsen and C. Zobel. Aldosterone induces electrical remodeling independent of hypertension. Int J Cardiol 2013;164(2):170-8

**ALZET Comments:** Aldosterone; PEG 400; SC; Rat; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (Male Wistar rats (48 rats, mean body weight 211 g±18 g); Dose (1 µg/h); Functionality of mp verified by Serum Aldosterone levels measured using an aldosterone radioimmunoassay kit;.

**Q2530:** L. Calvier, M. Miana, P. Reboul, V. Cachofeiro, E. Martinez-Martinez, R. A. de Boer, F. Poirier, P. Lacolley, F. Zannad, P. Rossignol and N. Lopez-Andres. Galectin-3 Mediates Aldosterone-Induced Vascular Fibrosis. ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY 2013;33(1):67-U221

**ALZET Comments:** Aldosterone; NaCl; ethanol; Mice; 3 weeks; Control animals received mp w/ vehicle; animal info (wt, Gal-3 KO); 5% ethanol used.

**Q5532:** A. S. Brem, D. J. Morris, X. Li, Y. Ge, S. Shaw and R. Gong. Adrenalectomy amplifies aldosterone induced injury in cardiovascular tissue: an effect attenuated by adrenally derived steroids. Steroids 2013;78(3):347-55

**ALZET Comments:** Aldosterone, dehydrocorticosterone, 11-; DMSO; SC; Mice; 7 days; Controls received mp w/ (DMSO) (sham operated); animal info (C57BL/6 mice weighing 20-25 g); Cardiovascular (Aldosterone exposure); Therapeutic indication (Cardiovascular); Aldosterone (8 ug/kg/day); 11-dehydrocorticosterone (800 ug/kg/day).

**Q2393:** Y. G. Yuan, S. M. Huang, W. Y. Wang, Y. Y. Wang, P. Zhang, C. H. Zhu, G. X. Ding, B. C. Liu, T. X. Yang and A. H. Zhang. Activation of peroxisome proliferator-activated receptor-gamma coactivator 1alpha ameliorates mitochondrial dysfunction and protects podocytes from aldosterone-induced injury. Kidney International 2012;82(7):771-789

**ALZET Comments:** Aldosterone; SC; Mice; 7 days; Animal info (C57BL/6, 25-30 g, 8 wks old); functionality of mp verified via plasma drug levels.

**Q2836:** B. J. Xue, Z. M. Zhang, C. F. Roncari, F. Guo and A. K. Johnson. Aldosterone Acting Through the Central Nervous System Sensitizes Angiotensin II-Induced Hypertension. Hypertension 2012;60(4):1023-U482

**ALZET Comments:** Angiotensin II; aldosterone; SC; CSF/CNS; Rat; 2001; 2002; 1, 2 weeks; Control animals received mp w/ vehicle; animal info (Sprague Dawley, male, 10-12 wks old); peptides; multiple pumps used (2).



**Q2080:** L. Waeckel, L. Potier, C. Chollet, C. Taveau, P. Bruneval, R. Roussel, F. henc-Gelas and N. Bouby. Antihypertensive Role of Tissue Kallikrein in Hyperaldosteronism in the Mouse. *Endocrinology* 2012;153(8):3886-3896

**ALZET Comments:** Aldosterone; Saline, isotonic; SC; Mice; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (TK -/-, wt).

**Q2372:** B. J. Veitenheimer, W. C. Engeland, P. A. Guzman, G. D. Fink and J. W. Osborn. Effect of global and regional sympathetic blockade on arterial pressure during water deprivation in conscious rats. *American Journal of Physiology-Heart and Circulatory Physiology* 2012;303(8):H1022-H1034

**ALZET Comments:** Aldosterone; Propylene glycol; SC; Rat; 2002; Control animals received mp w/ vehicle; animal info (Sprague Dawley, male); replacement therapy (adrenalectomy).

**Q2006:** N. van der Lubbe, C. H. Lim, M. E. Meima, R. van Veghel, L. L. Rosenbaek, K. Mutig, A. H. J. Danser, R. A. Fenton, R. Zietse and E. J. Hoorn. Aldosterone does not require angiotensin II to activate NCC through a WNK4-SPAK-dependent pathway. *PFLUGERS ARCHIV-EUROPEAN JOURNAL OF PHYSIOLOGY* 2012;463(6):853-863

**ALZET Comments:** Aldosterone; Rat; 4 days; Controls received mp w/ vehicle; animal info (Sprague Dawley, 15 wks old, 370 g); replacement therapy (adrenalectomy).

**Q2834:** N. van der Lubbe, P. M. Jansen, M. Salih, R. A. Fenton, A. H. van den Meiracker, A. H. J. Danser, R. Zietse and E. J. Hoorn. The Phosphorylated Sodium Chloride Cotransporter in Urinary Exosomes Is Superior to Prostatein as a Marker for Aldosteronism. *Hypertension* 2012;60(3):741-U315

**ALZET Comments:** Aldosterone; SC; Rat; 8 days; Control animals received mp w/ vehicle; animal info (Sprague Dawley, male, 15 wks old); replacement therapy (adrenalectomy).

**Q2306:** K. Uchimura, Y. Kakizoe, T. Onoue, M. Hayata, J. Morinaga, R. Yamazoe, M. Ueda, T. Mizumoto, M. Adachi, T. Miyoshi, N. Shiraishi, Y. Sakai, K. Tomita and K. Kitamura. In vivo contribution of serine proteases to the proteolytic activation of gammaENaC in aldosterone-infused rats. *American Journal of Physiology-Renal Physiology* 2012;303(7):F939-F943

**ALZET Comments:** Aldosterone; DMSO; saline, isotonic; SC; Rat; 2002; 10 days; Control animals received mp w/ vehicle; animal info (Sprague Dawley, male, wks old, 160-170 g).

**Q1870:** Y. Terada, S. Ueda, K. Hamada, Y. Shimamura, K. Ogata, K. Inoue, Y. Taniguchi, T. Kagawa, T. Horino and T. Takao. Aldosterone stimulates nuclear factor-kappa B activity and transcription of intercellular adhesion molecule-1 and connective tissue growth factor in rat mesangial cells via serum- and glucocorticoid-inducible protein kinase-1. *Clinical and Experimental Nephrology* 2012;16(1):81-88

**ALZET Comments:** Aldosterone; Ethanol; SC; Rat; 2002; Controls received mp w/ vehicle; animal info (Sprague Dawley, male, 150-200 g, uniphrectomized); replacement therapy (nephrectomy); 0.5% ethanol used.

**Q2185:** Y. Ogawa, M. Mukoyama, H. Yokoi, M. Kasahara, K. Mori, Y. Kato, T. Kuwabara, H. Imamaki, T. Kawanishi, K. Koga, A. Ishii, T. Tokudome, I. Kishimoto, A. Sugawara and K. Nakao. Natriuretic Peptide Receptor Guanylyl Cyclase-A Protects Podocytes from Aldosterone-Induced Glomerular Injury. *Journal of the American Society of Nephrology* 2012;23(7):1198-1209

**ALZET Comments:** Aldosterone; Ethanol; SC; Mice; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (male, GC-A KO, 28 g); replacement therapy (uniphrectomized); 2% ethanol used.

**Q2410:** A. McCurley, P. W. Pires, S. B. Bender, M. Aronovitz, M. J. Zhao, D. Metzger, P. Chambon, M. A. Hill, A. M. Dorrance, M. E. Mendelsohn and I. Z. Jaffe. Direct regulation of blood pressure by smooth muscle cell mineralocorticoid receptors. *Nature Medicine* 2012;18(9):1429-U182

**ALZET Comments:** Aldosterone; angiotensin II; Mice; 2 weeks; Animal info (MR KO); peptides.

**Q1886:** Y. Liu, K. Hirooka, A. Nishiyama, B. Lei, T. Nakamura, T. Itano, T. Fujita, J. S. Zhang and F. Shiraga. Activation of the aldosterone/mineralocorticoid receptor system and protective effects of mineralocorticoid receptor antagonism in retinal ischemia-reperfusion injury. *Experimental Eye Research* 2012;96(1):116-123



**ALZET Comments:** Aldosterone; DMSO; SC; Rat; 1007D; Animal info (Sprague Dawley, male, 200-250 g); 5% DMSO used; ischemia.

**Q2068:** C. Lammers, T. Dartsch, M. C. Brandt, D. Rottlaender, M. Halbach, G. Peinkofer, S. Ockenpoehler, M. Weiergraeber, T. Schneider, H. Reuter, J. Mueller-Ehmsen, J. Hescheler, U. C. Hoppe and C. Zobel. Spironolactone Prevents Aldosterone Induced Increased Duration of Atrial Fibrillation in Rat. *CELLULAR PHYSIOLOGY AND BIOCHEMISTRY* 2012;29(5-6):833-840

**ALZET Comments:** Aldosterone; PEG 400; SC; Rat; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (Wistar, male, 233 g).

**Q1894:** D. A. Kasal, T. Barhoumi, M. W. Li, N. Yamamoto, E. Zdanovich, A. Rehman, M. F. Neves, P. Laurant, P. Paradis and E. L. Schiffrin. T Regulatory Lymphocytes Prevent Aldosterone-Induced Vascular Injury. *Hypertension* 2012;59(2):324-U414

**ALZET Comments:** Aldosterone; Mice; 14 days; Animal info (male, C57BL6, 13-15 wks old, male).

**Q2305:** A. G. Garcia, R. M. Wilson, J. Heo, N. R. Murthy, S. Baid, N. Ouchi and F. Sam. Interferon-gamma ablation exacerbates myocardial hypertrophy in diastolic heart failure. *American Journal of Physiology-Heart and Circulatory Physiology* 2012;303(5):H587-H596

**ALZET Comments:** Aldosterone, d-; Mice; 4 weeks; Control animals received mp w/ saline; animal info (IFN-gamma KO, 12 wks old, male, 25-27 g); replacement therapy (uniphrectomy); 4-week pump used.

**Q1980:** W. Ding, L. Yang, M. M. Zhang and Y. Gu. Chronic inhibition of nuclear factor kappa B attenuates aldosterone/salt-induced renal injury. *LIFE SCIENCES* 2012;90(15-16):600-606

**ALZET Comments:** Aldosterone; Ethanol; SC; Rat; 2004; 4 weeks; Controls received mp w/ vehicle; animal info (Sprague Dawley, male, 5 wks old, 180-208 g); 0.5% ethanol used; replacement therapy (nephrectomy).

**Q2735:** C. Bay-Richter, L. Hallberg, F. Ventorp, S. Janelidze and L. Brundin. Aldosterone synergizes with peripheral inflammation to induce brain IL-1beta expression and depressive-like effects. *Cytokine* 2012;60(3):749-754

**ALZET Comments:** Aldosterone; Ethanol; saline; SC; Rat; 2002; Control animals received mp w/ vehicle; animal info (Wistar, male, 200-250 g); post op. care (xylocain); 1% ethanol used.

**Q2154:** N. L. Andres, A. Tesse, V. Regnault, H. Louis, V. Cattan, S. N. Thornton, C. Labat, A. Kakou, S. Tual-Chalot, S. Faure, P. Challande, M. Osborne-Pellegrin, M. C. Martinez, P. Lacolley and R. Andriantsitohaina. Increased Microparticle Production and Impaired Microvascular Endothelial Function in Aldosterone-Salt-Treated Rats: Protective Effects of Polyphenols. *PLoS One* 2012;7(7):U69-U82

**ALZET Comments:** Aldosterone; SC; Rat; 2004; 4 weeks; Animal info (Sprague Dawley, male, ); replacement therapy (uniphrectomy).