

Dr. John DiGiovanni

Publications

Dated, 10/04/2010

Segrelles, C., Lu, J., Hammann, B., Santos, M., Moral, M., Cascallana, J.L., Lara, M.F., Rho, O., Carbajal, S., Traag, J., Beltran, L., Martinez-Cruz, A.B., Garcia-Escudero, R., Lorz, C., Ruiz, S., Bravo, A., Paramio, J.M., DiGiovanni, J. Deregulated activity of Akt in epithelial basal cells induces spontaneous tumors and heightened sensitivity to skin carcinogenesis. *Cancer Res.* 67:10879-10888, 2007.

Lee, S., Chari, N.S., Kim, H.W., Wang, X., Roop, D.R., Cho, S.H., DiGiovanni, J., McDonnell, T.J. Cooperation of Hras and Bcl-2 during multistep skin carcinogenesis. *Mol. Carcinogenesis* 46:949-957, 2007.

Lu, J., Rho, O., Wilker, E., Beltran, L., DiGiovanni, J. Activation of epidermal Akt by diverse mouse skin tumor promoters. *Mol. Cancer Res.* 5:1342-1352, 2007.

Segrelles, C., Moral, M., Lorz, C., Santos, M., Lu, J., Cascallana J.L., Lara, M.F., Carbajal, S., Martinez-Cruz, A.B., Garcia-Escudero R., Beltran, L., Segovia, J.C., Bravo, A., DiGiovanni, J., Paramio, J.M. Constitutively active Akt induces ectodermal defects and impaired bone morphogenetic protein signaling. *Mol. Biol. Cell.* 19:137-149, 2008.

Chan, K.S., Sano, S., Kataoka, K., Carbajal, S., Clifford, J., Peavey, M., Shen, J., DiGiovanni, J. Forced expression of a constitutively active form of Stat3 in mouse epidermis enhances malignant progression of skin tumors induced by two-stage carcinogenesis. *Oncogene* 27:1087-1094, 2008

Strom, S.S., Yamamura, Y., Forman, M.R., Pettaway, C.A., Barrera, S.L., DiGiovanni, J. Saturated fat intake predicts biochemical failure after prostatectomy. *Int. J. Cancer* 122:2581-2585, 2008.

Moore, T., Carbajal, S., Beltran, L., Perkins, S.N., Yakar, S., Leroith, D., Hursting, S.D., DiGiovanni, J. Reduced susceptibility to two-stage skin carcinogenesis in mice with low circulating insulin-like growth factor 1 levels. *Cancer Res.* 68:3680-3688, 2008.

Moore, T., Beltran, L., Carbajal, S., Strom, S., Traag, J., Hursting, S.D., DiGiovanni, J. Dietary energy balance modulates signaling through the Akt/mammalian target of rapamycin pathways in multiple epithelial tissues. *Can. Prev. Res.* 1:65-76, 2008.

Liu, B., Xia, X., Carbajal, S., DiGiovanni, J., Fischer, S., Hu, Y. IKK α deletion in keratinocytes causes cell-autonomous epidermal hyperplasia that is rescued by inactivation of the EGF receptor. *Cancer Cell* 14:212-225, 2008.

Kataoka, K., Kim, D.J., Carbajal, S., Clifford, J., DiGiovanni, J. Stage-specific disruption of Stat3 demonstrates a direct requirement during both the initiation and promotion stages of mouse skin tumorigenesis. *Carcinogenesis* 29:1108-1114, 2008.

de Ostrovich, K.K., Lambertz, I., Colby, J.K.L., Tian, J., Rundhaug, J.E., Johnston, D., Conti, C.J., DiGiovanni, J., Fuchs-Young, R. Paracrine overexpression of insulin-like growth factor-1 enhances mammary tumorigenesis *in vivo*. *Amer. J. Pathol.* 173:824-834, 2008.

Kleiner, H.E., Xia, X., Sonoda, J., Zhang, J., Pontius, E., Abey, J., Evans, R.M., Moore, D.D., DiGiovanni, J. Effects of naturally occurring coumarins on hepatic drug metabolizing enzymes in mice. *Tox. and Applied Pharm.* 232:337-350, 2008.

Wang, G., Carbajal, S., Vijg, J., DiGiovanni, J., Vasquez, K.M. DNA structure-induced genomic instability *in vivo*. *JNCI* 100:1815-1817, 2008.

Moral, M., Segrelles, C., Lara, M.F., Martinez-Cruz, A.B., Lorz, C., Santos, M., Garcia-Escudero, R., Lu, J., Kiguchi, K., Buitrago, A., Costa, C., Saiz, C., Rodriguez-Peralto, J.L., Martinez-Tello, F.J., Rodriguez-Pinilla, M., Sanchez-Cespedes, M., Garin, M., Grande, T., Bravo, A., DiGiovanni, J., Paramio, J.M. Akt activation synergizes with Trp53 loss in oral epithelium to produce a novel mouse model for head and neck squamous cell carcinoma. *Cancer Res.* 69:1099-1108, 2009.

- Kim, D.J., Angel, J.M., Sano, S., DiGiovanni, J. Constitutive activation and targeted disruption of signal transducer and activator of transcription 3 (Stat3) in mouse epidermis reveal its critical role in UVB-induced skin carcinogenesis. *Oncogene* 28:950-960, 2009.
- Chen, X., Schneider-Broussard, R., Hollowell, D., McArthur, M., Jeter, C.R., Benavides, F., DiGiovanni, J., Tang, D.G. Abnormal differentiation, hyperplasia and embryonic/perinatal lethality in transgenic mice with SV40 T/t antigens targeted to the cyokeratin 5 cellular compartment. *Differentiation* 77:324-334, 2009.
- Hursting, S.D., Perkins, S.N., Lavigne, J.A., Beltran, L., Haines, D.C., Hill, H.L., Alvord, G., Barrett, C., DiGiovanni, J. Urothelial overexpression of insulin-like growth factor-1 increases susceptibility to p-cresidine-induced bladder carcinogenesis in transgenic mice. *Molec. Carcinogenesis*, 48:671-677, 2009.
- Kim, D.J., Kataoka, K., Sano, S., DiGiovanni, J. Targeted disruption of Bcl-x_L in mouse keratinocytes inhibits both UVB- and chemically-induced skin carcinogenesis. *Molec. Carcinogenesis*, 48:873-885, 2009.
- Kim, D.J., Kataoka, K., Rao, D., Cotsarelis, G, DiGiovanni, J. Targeted disruption of Stat3 reveals a major role for follicular stem cells in skin tumor initiation. *Cancer Res.*, 69:7587-7594, 2009.
- Moral, M., Segrelles, C., Martinez-Cruz, A.B., Lorz, C., Santos, M., Garcia-Escudero, R., Lu, J., Buitrago, A., Costa, C., Saiz, C., Ariza, J.M., Duenas, M., Rodriguez-Peralto, J.L., Martinez-Tello, F.J., Rodriguez-Pinilla, M., Sanchez-Cespedes, M., DiGiovanni, J., Paramio, J.M. Transgenic mice expressing constitutive active Akt in oral epithelium validate Klf4 as a potential biomarker of head and neck squamous cell carcinoma. *In Vivo*, 23:653-660, 2009.
- Brandon, J., Conti, C., DiGiovanni, J., Gimenez-Conti, I. Carcinogenic effects of MGP-7 and B[a]P on the hamster cheek pouch. *Toxicol Pathol*, 37:733-740, 2009.
- Kim, D.J., Tremblay, M.L., DiGiovanni, J. UVB-mediated nuclear translocation of protein tyrosine phosphatase TC-PTP is required for rapid Stat3 dephosphorylation in skin. *PloSOne*, 5(4):e10290, 2010.
- Yasgar, A., Shultz, J., Zhou, W., Wang, H., Huang, F., Murphy, N., Abel, E.L., DiGiovanni, J., Inglese, J., Simeonov, A. A high-throughput 1,536-well luminescence assay for glutathione S-transferase activity. *Assay Drug Dev Technol*, 8(2):200-11, 2010.
- Kiguchi, K., Kitamura, T., Moore, T., Rumi, M., Chang, H., Treece, D., Ruffino, L., Connolly, K., DiGiovanni, J. Dual inhibition of both the EGFR and erbB2 effectively inhibits promotion of skin tumors during two-stage carcinogenesis. *Cancer Prevention Research*, 2010 Aug;3(8):940-52
- Perez, C.J., Jaubert, J., Guénet, J., Barnhart, K., Ross-Inta, C.M., Quintanilla, V.C., Aubin, I., Brandon, J.L., Otto, N., DiGiovanni, J., Gimenez-Conti, I., Giulivi, C., Kusewitt, D.F., Conti, C.J., Benavides, F. Two hypomorphic alleles of mouse *Ass1* as a new animal model of citrullinemia type I and other hyperammonemic syndromes. *Am J Pathol.*, 2010 Aug 19. [Epub ahead of print]
- Miyoshi, K., Takaishi, M., Nakajima, K., Ikeda, M., Asao, N., DiGiovanni, J., Sano, S., Stat3 is a therapeutic target for psoriasis. *J Invest Dermatol.*, 2010, Sep 2. [Epub ahead of print]
- Tian, J., Shirley, S.H., Lambert, I., Gimenez-Conti, I., DiGiovanni, J., Conti, C., Korach, K.S., Fuchs-Young's, R. Developmental stage determines estrogen receptor alpha expression and nongenomic actions that control IGF-1 signaling and mammary proliferation. *J Clin Invest*, in press, 2010.
- Abel, E., Angel, J., Riggs, P., Langfield, L., Lo, H., Person, M., Awasthi, Y., Wang, L., Strom, S., Wei, Q., DiGiovanni, J., Gsta4, a modifier of susceptibility to skin tumor development in mice and humans. *JNCI*, in press, 2010.
- Gregorio, J., Meller, S., Conrad, C., Di Nardo, A., Bernhard, H., Lauerma, A., Arai, N., Gallo, R.L., DiGiovanni, J., Gilliet, M., Plasmacytoid dendritic cells sense skin injury and promote wound healing through type I interferons. *J Exp Med*, in press, 2010.