

PUBLICATIONS

Crabtree, J.S., Jelinsky, S.A., Harris, H.A., Choe, S.E., Cotreau, M.M., Kimberland, M.L., Wilson, E., Saraf, K.A., McCampbell, A.S., Dave, B., Broaddus, R.R., **Brown, E.L.**, Kao, W., Skotnicki, J.S., Abou-Gharbia, M., Winneker, R.C., and Walker, C.L., "Comparison of Human and Rat Uterine Leiomyomata: Identification of a Dysregulated mTOR Pathway" Cancer Res., 69, 6171-8 (2009).

Anand, V., Reichling, L.J., Lipinski, K., Stochaj, W., Duan, W., Kelleher, K., Pungaliya, P., **Brown, E.L.**, Reinhart, P.H., Somberg, R., Hirst, W., Riddle, S.M., and Braithwaite, S.P. "Enzymological Characterization of the Kinase Activity of Leucine Rich Repeat Kinase 2," FEBS Journal, 276, 466-478 (2009).

Jelinsky, S.A., Choe, S.E., Crabtree, J.S., Cotreau, M., Wilson, E., Saraf, K., Dorner, A.J., **Brown, E.L.**, Peano, B. J., Zhang, X., Winneker, R.C., and Harris, H.A. "Molecular Analysis of the Vaginal Response to Estrogens in the Ovariectomized Rat and Postmenopausal Woman," BMC Medical Genomics, 1, 27 (2008).

Jelinsky, S.A., Turner, T.Y., Bang, H.J., Finger, J.N., Solarz, M.K., Wilson, E., **Brown, E.L.**, Kopf, G.S., and Johnston, D.S. "The Rat Epididymal Transcriptome: Comparison of Segmental Gene Expression in the Rat and Mouse Epididymides," Biol. Reprod., 76, 561-70 (2007).

Robinson, J.A., Chatterjee-Kishore, M., Yaworsky, P.J., Cullen, D.M., Zhao, W., Li, C., Kharode, Y., Sauter, L., Babij, P., **Brown, E.L.**, Akhter, M.P., Mark L Johnson, M.J., Recker, R.R., Komm, B.S., and Bex, F.J. "Wnt/ β -Catenin Signaling is a Normal Physiological Response to Mechanical Loading in Bone," J. Biol. Chem., 281, 31720-28 (2006).

Berasi, S.P., Huard, C., Li, D., Shih, H.H., Sun, Y., Paulsen, J.E., **Brown, E.L.**, Gimeno, R.E., and Martinez, R.V., "Inhibition of Gluconeogenesis Through Transcriptional Activation of EGR1 and DUSP4 by AMP-activated Kinase," J. Biol. Chem., 281, 27167-77 (2006).

Yudt, M.R., Berrodin T.J., Jelinsky S.A., Hanna L.A., **Brown E.L.**, Chippari S., Bhat R.A., Winneker, R.C., and Zhang, Z., "Selective and Opposing Actions of Progesterone Receptor Isoforms in Human Endometrial Stromal Cells," Mol Cell Endocrinol., 247, 116-26 (2006).

Bray, J.D., Jelinsky, S.A., Ghatge, R., Bray, J.A., Tunkey, C., Saraf, K., Jacobsen, B.M., Richer, J.K., **Brown, E.L.**, Winneker, R.C., Horwitz, K.B., and Lyttle, C.R., "Quantitative Analysis of Gene Regulation by Seven Clinically Relevant Progestins Suggests a Highly Similar Mechanism of Action through Progesterone Receptors in T47D Breast Cancer Cells," J. Steroid Biochem. Mol. Biol., 97, 328-41 (2005).

Baugh, L.R., Wen, J.C., Hill, A.A., Slomin, D.K., **Brown, E.L.**, and Hunter, C.P., "Synthetic Lethal Analysis of *C. elegans* Identifies Conserved Genetic Interactions," Genome Biology, 6, R45 (2005).

Baugh, L.R., Hill, A.A., Claggett, J.M., Hill-Harfe, K., Slonim, D.K., **Brown, E.L.**, and Hunter, C.P., "The Hemeodomain Protein PAL-1 Specifies a Lineage-Specific Regulatory Network in the *C. elagens* Embryo," Development, 132, 1843-54 (2005).

Velasco, A.M., Gillis, K.A., Li, Y., **Brown, E.L.**, Sadler, T.M., Achilleos, M., Greenberger, L.M., Frost, P., Bai, W., and Zhang, Y., "Identification and Validation of Novel Androgen-regulated Genes in Prostate Cancer," Endocrinology, 145, 3913-24 (2004).

Billiard, J., Moran, R.A., Whitley, M.Z., Chatterjee-Kishore, M, Gillis, K, **Brown, E.L.**, Komm, B.S., and Bodine, P.V., "Transcriptional Profiling of Human Osteoblast Differentiation," J Cell Biochem., 15, 389-400 (2003).

Jelinsky, S.A., Harris, H.A., **Brown, E.L.**, Flanagan, K., Zhang, X., Tunkey, C., Lai, K., Lane, M.V., Simcoe, D.K., and Evans, M.J., "Global Transcription Profiling of Estrogen Activity: Estrogen Receptor Alpha Regulates Gene Expression in the Kidney," Endocrinology, 144, 701-10 (2003).

Baugh, L.R., Hill, A.A., Slonim, D.K., **Brown, E.L.** and Hunter, C.P., "Composition and Dynamics of the *Caenorhabditis elegans* Early Embryonic Transcriptome," Development, **130**, 889-900 (2003).

Dunman, P.M., Murphy, E. Haney, S., Palacios, D., Tucker-Kellogg, G., Wu, S., **Brown, E.L.**, Zagursky, R.J., Shlaes, D. and Projan, S.J., "Transcriptional Profiling-Based Identification of *Staphylococcus aureus* Genes Regulated by the *agr* and/or *sarA* Loci," J. Bacteriol., **183**, 7341-7353 (2001).

Hill, A.A., **Brown, E.L.**, Whitley, M.Z., Tucker-Kellogg, G., Hunter, C.P. and Slonim, D.K., "Evaluation of Normalization Procedures for Oligonucleotide Array Data Based on Spiked cRNA Controls," Genome Biology, 2001, **2(12)**:research0055.1-0055.13.

Baugh, L.R., Hill, A.A., **Brown, E.L.** and Hunter, C.P., "Quantitative Analysis of mRNA Amplification by *in vitro* Transcription," Nucleic Acids Res., **29**, e29 (2001).

Hill, A.A., Hunter, C.P., Tsung, B.T., Tucker-Kellogg, G. and **Brown, E.L.**, "Genomic Analysis of Gene Expression in *C. elegans*," Science, **290**, 809-812 (2000).

Lockhart, D.J., Dong, H., Byrne, M.C., Follettie, M.T., Gallo, M.V., Chee, M.S., Mittmann, M., Wang, C., Kobayashi, M., Horton, H., and **Brown, E.L.**, "Expression Monitoring by Hybridization to High-Density Oligonucleotide Arrays," Nature Biotechnology, **14**, 1675-1680 (1996).

Brown, E.L., Wooters, J.L., Ferenz, C.R., O'Brien, C.M., Hewick, R.M., and Herrmann S.H., "Characterization of the Peptide Binding to the Murine MHC Class I H-2K^k Molecule," J. Immunol., **153**, 3079 (1994).

Hatzfield, J., Li, M.-L., **Brown, E.L.**, Sookdeo, H., Levesque, J.-P., O'Toole, T., Gurney, C., Clark, S.C. and Hatzfield, A. "Release of Early Hematopoietic Progenitors from Quiescence by Antisense TGF- β 1 or RB Oligonucleotides," J. Exp. Med., **174**, 925 (1991).

Ramakrishnan, S., Xu, F.J., Brandt, S.J., Niedel, J.E., Bast, R.C. and **Brown, E.L.**, "Constitutive Production of Macrophage Colony-stimulating Factor by Human Ovarian and Breast Cancer Cell Lines," J. Clin. Invest., **83**, 921 (1988).

Jacobs, K.A., Rudersdorf, R., Neill, S.D., Dougherty, J.P., **Brown, E.L.** and Fritsch, E.F., "The Thermal Stability of Oligonucleotide Duplexes is Sequence Independent in Tetraalkylammonium Salt Solutions: Application to Identifying Recombinant DNA Clones," Nucleic Acids Res., **16**, 4637-4650 (1988).

Kremsky, J.N., Wooters, J.L., Dougherty, J.P., Meyers, R.E., Collins, M. and **Brown, E.L.**, "Immobilization of DNA via Oligonucleotides Containing an Aldehyde or Carboxylic Acid Group at the 5' Terminus," Nucleic Acids Res., **15**, 2891-2909 (1987).

Jones, S.S., Brown, J.E., Vanstone, D.A., Stone, D.K. and **Brown, E.L.**, "Automating the Purification and Isolation of Synthetic DNA," BioTechnology **5**, 67-70 (1987).

Bikel, I., Mamon, H., **Brown, E.L.**, Boltax, J., Agha, M. and Livingston, D.M., "The t-Unique Coding Domain is Important to the Transformation Maintenance Function of the Simian Virus 40 Small t Antigen," Mol. Cell. Biol., **6**, 1172-78 (1986).

Gasson, J.C., Golde, D.W., Kaufman, S.E., Westbrook, C.A., Hewick, R.M., Kaufman, R.J., Wong, G.G., Temple, P.A., Leary, A.C., **Brown, E.L.**, Orr, E.C. and Clark, S.C., "Molecular Characterization and Expression of the Gene Encoding Human Erythroid-Potentiating Activity," Nature, **315**, 768-771 (1985).

Wong, G.G., Witek, J.S., Temple, P.A., Wilkens, K.M., Leary, A.C., Luxenberg, D.P., Jones, S.S.,

Brown, E.L., Kay, R.M., Orr, E.C., Shoemaker, C., Golde, D., Kaufman, R., Hewick R., Wang, E. and Clark S., "Human GM-CSF: Molecular Cloning of the Complementary DNA and Purification of the Natural and Recombinant Proteins," Science **228**, 810-815 (1985).

Wong, G.G., Witek, J.S., Temple, P.A., Wilkens, K.M., Leary, A.C., Luxenberg, D.P., Jones, S.S., **Brown, E.L.**, Kay, R.M., Orr, E.C., Shoemaker, C., Golde, D.M., Kaufman, R.J., Hewick, R.M., Wang, E.A. and Clark, S.C., "Isolation of cDNAs Encoding Human and Gibbon GM-CSF," Prog. Clin. Biol. Res., **191**, 351-366 (1985).

Jones, S.S., Brown, J.E., Vanstone, D.A., Stone, D.K., and **Brown, E.L.**, "Synthetic DNA: Application of Robotics to the Purification of Oligonucleotides," in Advances in Laboratory Automation, Vol. 2, Strimaitis, J.R. and Hawk, G.L., eds., Zymark Corp., Hopkinton, MA, 1985, pp. 431-446.

Wong, G.G., Giannotti, J.S., Temple, P.A., Wilkens, K.M., Leary, A.C., Luxenberg, D.P., Jones, S.S., **Brown, E.L.**, Kay, R.M., Orr, E.C., Shoemaker, C., Golde, D.W., Kaufman, R.J., Hewick, R.M., Wang, E.A. and Clark, S.C., "Isolation of cDNAs Encoding Human and Gibbon GM-CSF," Exp. App. for the Study Hemoglobin Switching, 351-366 (1985).

Toole, J.J., Knopf, J.L., Wozney, J.M., Sultzman, L.A., Buecker, J.L., Pittman, D.D., Kaufman, R.J., **Brown, E.L.**, Shoemaker, C., Orr, E.C., Amphlett, G.W., Foster, B., Coe, M.L., Knutson, G., Fass, D. and Hewick, R.M., "Molecular Cloning of a cDNA Encoding Human Antithaemophilic Factor," Nature **312**, 342-347 (1984).

Wharton, R.P., **Brown, E.L.**, and Ptashne, M., "Substituting an Alpha-Helix Switches the Sequence-Specific DNA Interactions of a Repressor," Cell **38**, 361-369 (1984).

Clark, S.C., Arya, S.K., Wong-Staal, F., Matsumoto-Kobayashi, M., Kay, R.M., Kaufman, R.J., **Brown, E.L.**, Shoemaker, C., Copeland, T., Oroszlan, S., Smith, K., Sarngadharan, M.G., Lindner, S.G. and Gallo, R.C., "Human T-Cell Growth Factor: Partial Amino Acid Sequence, cDNA Cloning and Organization and Expression in Normal and Leukemic Cells," Proc. Natl. Acad. Sci. U.S.A. **81**, 2543-2547 (1984).

Dunn, R.J., Belagaje, R., **Brown, E.L.**, and Khorana, H.G., "The Synthesis and Cloning of Two Tyrosine Suppressor tRNA Genes with Altered Promoter Sequences," J. Biol.Chem. **256**, 6109-6118 (1981).

Ryan, M.J., **Brown, E.L.**, Belagaje, R., Fritz, H.-J. and Khorana, H.G., "Cloning of Two Chemically Synthesized Genes for a Precursor to the Tyrosine Suppressor tRNA," in tRNA, Abelson, J., Shimmel, P. and Soll, D., eds., Cold Spring Harbor Laboratory New York, 1979.

Brown, E.L., Belagaje, R., Ryan, M.J., and Khorana, H.G., "Chemical Synthesis and Cloning of a Tyrosine tRNA Gene," in Methods in Enzymology, Vol. 68, Wu, R., ed., Academic Press, New York, 1979, pp. 109-151.

Ryan, M.J., **Brown, E.L.**, Belagaje, R., Fritz, H.-J. and Khorana, H.G., "Synthetic Tyrosine Suppressor tRNA Gene with an Altered Promoter Sequence," J. Biol. Chem. **254**, 10803 (1979).

Ryan, M.J., **Brown, E.L.**, Sekiya, T., Kupper, H. and Khorana, H.G., "Total Synthesis of a Tyrosine Suppressor Transfer RNA Gene. 18. Biological Activity and Transcription, In Vitro, of the Cloned Gene," J. Biol. Chem. **254** 5817 (1979).

Sekiya, T., Takeya, T., **Brown, E.L.**, Belagaje, R., Contreras, R., Fritz, H.-J., Gait, M.J., Lees, R.G., Norris, K., Ryan, M.J. and Khorana, H.G., "Total Synthesis of a Tyrosine Suppressor Transfer RNA Gene. 16. Enzymatic Joinings of the Constituent Duplexes to Form a 207 Base-Pair Long DNA," J. Biol. Chem. **254**, 5787 (1979)

Sekiya, T., **Brown, E.L.**, Belagaje, R., Fritz, H.-J., Norris, K., Ryan, M.J. and Khorana, H.G., "Total Synthesis of a Tyrosine Suppressor Transfer RNA Gene. 15. Synthesis of the Promoter Region," J. Biol. Chem. **254**, 5781 (1979).

Belagaje, R., **Brown, E.L.**, Fritz, H.J., Lees, R.G., and Khorana, H.G., "Total Synthesis of a Tyrosine Suppressor Transfer RNA Gene. 14. Chemical Synthesis of Oligonucleotide Segments Corresponding to the Terminal Regions," J. Biol. Chem. **254**, 5765 (1979).

Belagaje, R., **Brown, E.L.**, Gait, M.J., Khorana, H.G., and Norris, K.E., "Total Synthesis of a Tyrosine Suppressor Transfer RNA Gene. 13. Synthesis of Deoxyribopolynucleotide Segments Corresponding to the Nucleotide Sequence -1 to -29 in the Promoter Region," J. Biol. Chem. **254**, 5754 (1979).

Belagaje, R., **Brown, E.L.**, Fritz, H.-J., Gait, M.J., Lees, R.G., Norris, K., Sekiya, T., Takeya, T., Contreras, R., Kupper, H., Ryan, M.J. and Khorana, H.G. "Total Synthesis of a Bacterial Gene. II. The Total DNA Including the Promoter and its Transcription," in Chemistry and Biology of Nucleosides and Nucleotides, Harmon, R.E., ed., Academic Press, New York, 1978, pp. 1-20.

Fritz, H.-J., Belagaje, R., **Brown, E.L.**, Fritz, R.H., Jones, R.A., Lees, R.G. and Khorana, H.G., "Total Synthesis of a Bacterial Gene. I. Chemical Synthesis of Oligonucleotides and Use of High Pressure Liquid Chromatography," in Chemistry and Biology of Nucleosides and Nucleotides, Harmon R.E., ed., Academic Press, New York, 1978, pp. 21-36.

Fritz, H.-J., Belagaje, R., **Brown, E.L.**, Fritz, R.H., Jones, R.A., Lees, R.G. and Khorana, H.G., "High Pressure Liquid Chromatography in Polynucleotide Synthesis," Biochemistry **17**, 1257 (1978).

Ryan, M.J., Belagaje, R., **Brown, E.L.**, Fritz, H.-J., Fritz, R.H., Gait, M.J., Kupper, H., Lees, R.G., Norris, K., Sekiya, T., Tayeka, T. and Khorana, H.G., "Biological Activity of the Chemically Synthesized Gene for the Tyrosine Suppressor tRNA," Federation Proc. **36** 732 (1977).

Brown, E.L., Belagaje, R., Fritz, H.-J., Norris, K. and Khorana, H.G., "Studies of the tRNA Tyr Gene Promoter," Federation Proc. **36**, 732 (1977).

Chapman, O.L., Koch, T.H., Klein, F., Nelson, P.J. and **Brown, E.L.** "Two Triplet Mechanisms in Photochemical Addition of 2-Cyclohexenones to 1,1-Dimethoxyethylene," J. Amer. Chem. Soc. **90**, (1968).

ISSUED PATENTS

Jelinsky, S.A., Harris, H.A., **Brown, E.L.**, Evans, M.J., and Frail, D.E., "Estrogen Receptor α Regulated Gene Expression, Related Assays, and Therapeutics", US Patent 7371207.

Lockhart, D.L., **Brown, E.L.**, Wong, G.G., Chee, M., and Gingeras, T.R., "Expression Monitoring by Hybridization to High Density Oligonucleotide Arrays", US Patent 6927032.

Lockhart, D.L., **Brown, E.L.**, Wong, G.G., Chee, M., and Gingeras, T.R., "Methods of Identifying Nucleic Acid Probes to Quantify the Expression of a Target Nucleic Acid", US Patent 6548257.

Lockhart, D.L., **Brown, E.L.**, Wong, G.G., Chee, M., and Gingeras, T.R., "Expression Monitoring by Hybridization to High Density Oligonucleotide Arrays", US Patent 6410229.

Lockhart, D.L., **Brown, E.L.**, Wong, G.G., Chee, M., and Gingeras, T.R., "Expression Monitoring by Hybridization to High Density Oligonucleotide Arrays," US Patent 6040138.

Brown, E.L., Dougherty, J.P., and Collins, M., "Methods for the Attachment of a Polynucleotide to a Preselected Material," US Patent 6022714.

Brown, E.L., "Composition of M-CSF conjugated to Cytotoxic Agents and a Method for Treating Cancers Characterized by Over-expression of the c-fms Proto-oncogene," US Patent 5084556.