

Full List of Peer-Reviewed Publications

1. Osbaldo Lopez-Charcas, Lucile Poisson, Oumnia Benouna, Roxane Lemoine, Stéphanie Chadet, Adrien Pétureau, Widad Lahlou, Serge Guyétant, Mehdi Ouaiissi, Piyasuda Pukkanasut, Shilpa Dutta, **Sadanandan E Velu**, Pierre Besson, Driffa Moussata, and Sébastien Roger, Voltage-Gated Sodium Channel NaV1.5 Controls NHE-1-Dependent Invasive Properties in Colon Cancer Cells, **Cancers**, 15: 46 (2023), PubMed PMID: 36612049, PubMed PMCID: PMC9817685, DOI: 10.3390/cancers15010046.
2. James Ross Terrell, Sijia Tang, Oluwafoyinsola Omobodunde Faniyi, In Ho Jeong, Jun Yin, Bhavitavya Nijampatnam, **Sadanandan E. Velu**, Wei Wang, Ruiwen Zhang and Ming Luo, Structural studies of antitumor compounds that target the RING domain of MDM2, **Protein Science**, 31: e4367 (2022), PubMed PMID: 35900024, PubMed PMCID: PMC9301682, DOI: 10.1002/pro.4367.
3. Cuijuan Han, Alireza Khodadadi-Jamayran, Adam H. Lorch, Qi Jin, Valentina Serafin, Ping Zhu, Yuliya Politanska, Limin Sun, Blanca T. Gutierrez-Diaz, Marina V. Pryzhkova, Hiam Abdala-Valencia, Elizabeth Thomas Bartom, Barbara Buldini, Giuseppe Basso, **Sadanandan E. Velu**, Kavitha Sarma, Basil B. Mattamana, Byoung-Kyu Cho, Rebecca C. Obeng, Young Ah Goo, Philip W. Jordan, Aristotelis Tsirigos, Yalu Zhou, Panagiotis Ntziachristos, SF3B1 homeostasis is critical for survival and therapeutic response in T cell leukemia, **Science Advances**, 8, eabj8357 (2022), PubMed PMID: 35061527, PubMed PMCID: PMC8782448, DOI: 10.1126/sciadv.abj8357.
4. Zekiye Ceren Arituluk, Jesse Horne, Bishnu Adhikari, Jeffrey Steltzner, Shomit Mansur, Parmanand Ahirwar, **Sadanandan E. Velu**, Nora E. Gray, Lukasz M. Ciesla and Yuping Bao, Identification of TrkB Binders from Complex Matrices Using a Magnetic Drug Screening Nanoplatfrom, **ACS Appl. Bio Mater.**, 4: 6244–6255 (2021), DOI: 10.1021/acsbm.1c00552.
5. Chandni Desai, Jon Thomason, Jordan Kohlmeyer, Anna Reisetter, Parmanand Ahirwar, Khadijeh Jahanseir, Mariah Leidinger, Georgina Ofori-Amanfo, Karen Fritchie, **Sadanandan E. Velu**, Patrick Breheny, Dawn Quelle, and Munir Tanas, Prognostic and therapeutic value of the Hippo pathway, RABL6A, and p53-MDM2 axes in sarcomas, Submitted to **Oncotarget**, 12: 740-755 (2021), PubMed PMID: 33889298, PubMed PMCID: PMC8057271, DOI: 10.18632/oncotarget.27928.
6. Bhavitavya Nijampatnam, Parmanand Ahirwar, Piyasuda Pukkanasut, Holly Womack, Luke Casals, Hua Zhang, Xia Cai, Suzanne M. Michalek, Hui Wu, and **Sadanandan E. Velu**, Discovery of Potent Inhibitors of Streptococcus mutans Biofilm with Antivirulence Activity, **ACS Medicinal Chemistry Letters**, 12 (1): 48–55 (2021), PubMed PMID: 33488963, PubMed PMCID: PMC7812604, DOI: 10.1021/acsmchemlett.0c00373.
7. Michiel van Gent, Adrian Reich, **Sadanandan E. Velu**, and Michaela U. Gack, Nonsense-mediated decay controls the reactivation of the oncogenic herpesviruses EBV and KSHV, **Plos Biology**, 19(2): e3001097 (2021), PubMed PMID: 33596193, DOI: 10.1371/journal.pbio.3001097.
8. Osbaldo Lopez-Charcas, Piyasuda Pukkanasut, **Sadanandan E. Velu**, William J. Brackenbury, Tim G. Hales, Pierre Besson, Juan Carlos Gomora, Sebastien Roger, Pharmacological and nutritional targeting of voltage-gated sodium channels in the treatment of cancers, **iScience**, 24: 102270 (2021), PubMed PMID: 33817575, PubMed PMCID: PMC8010468, DOI: 10.1016/j.isci.2021.102270.
9. Zviadi Aburjania, Jason D Whitt, Samuel Jang, Dwayaja H Nadkarni, Herbert Chen, J Bart Rose, **Sadanandan E Velu** (Co-corresponding author) and Renata Jaskula-Sztul, Synthetic Makaluvamine Analogs Decrease c-Kit Expression and Are Cytotoxic to Neuroendocrine Tumor Cells, **Molecules**, 25 (21): 4940 (2020), PubMed PMID: 33114525; PubMed PMCID: PMC7663375. DOI: 10.3390/molecules25214940.
10. Jaden Cowan, Mohammad Shadab, Dwayaja H. Nadkarni, Kailash KC, **Sadanandan E. Velu** (Co- corresponding author) and Nabiha Yusuf, A Novel Marine Natural Product Derived Pyrroloiminoquinone with Potent Activity against Skin Cancer Cells, **Marine Drugs**, 17, 1-12

- (2019), PubMed PMID: 31357586, PubMed PMCID: PMC6722685, DOI: 10.3390/md17080443.
11. Wei Wang, Jianwen Cheng, Jiang-Jiang Qin, Bo Hu, Xin Li, Bhavitavya Nijampatnam, **Sadanandan E Velu**, Jia Fan, Xin-Rong Yang, Ruiwen Zhang, MDM2-NFAT1 Dual Inhibitor, MA242: Effective against Hepatocellular Carcinoma, Independent of p53, **Cancer Letters**, 459: 156-167 (2019), PubMed PMID: 31181320, PubMed PMCID: PMC6650270, DOI: 10.1016/j.canlet.2019.114429.
 12. Wei Wang, Jiang-Jiang Qin, Sukesh Voruganti, Bhavitavya Nijampatnam, **Sadanandan E. Velu**, Ke-He Ruan, Ming Hu, Jianwei Zhou and Ruiwen Zhang, Discovery and Characterization of Dual Inhibitors of MDM2 and NFAT1 for Pancreatic Cancer Therapy, **Cancer Research**, 78(19): 5656-5667 (2018), DOI: 10.1158/0008-5472.CAN-17-3939.
 13. Sandeep Balu Shelar, Eun-Hee Shim, Garrett J. Brinkley, Anirban Kundu, Francesca Carobbio, Tyler Poston, Jubilee Tan, Vishwas Parekh, Daniel Benson, David K. Crossman, Phillip J. Buckhaults, Dinesh Rakheja, Richard Kirkman, Yusuke Sato, Seishi Ogawa, Shilpa Dutta, **Sadanandan E. Velu**, Ethan Emberley, Alison Pan, Jason Chen, Tony Huang, Devin Absher, Anja Becker, Conrad Kunick, Sunil Sudarshan, Biochemical and Epigenetic Insights into L-2-Hydroxyglutarate, a Potential Therapeutic Target in Renal Cancer, **Clinical Cancer Research**, 24(24): 6433-6446 (2018), DOI: 10.1158/1078-0432.CCR-18-1727.
 14. Bhavitavya Nijampatnam, Hua Zhang, Xia Cai, Suzanne M. Michalek' Hui Wu and **Sadanandan E. Velu**, Inhibition of *Streptococcus mutans* Biofilms by the Natural Stilbene Piceatannol Through the Inhibition of Glucosyltransferases, **ACS Omega** 3 (7), pp 8378-8385 (2018). PubMed PMID: 30087944, PubMed PMCID: PMC6072251, DOI: 10.1021/acsomega.8b00367.
 15. Sandeep Balu Shelar, Eun-hee Shim, Garrett Brinkley, Anirban Kundu, Hyeyoung Nam, Francesca Carobbio, Tyler Poston, Jubilee Tan, Daniel Benson, Dinesh Rakheja, Richard Kirkman, Yusuke Sato, Seishi Ogawa, Shilpa Dutta, **Sadanandan E. Velu**, David Crossman, Anja Becker, Conrad Kunick and Sunil Sudarshan, Abstract 5482: L-2HG/ L2HGDH Axis as therapeutic target for kidney cancer, **Cancer Research**, 78(13 Supplement): 5482-5482 (2018), DOI: 10.1158/1538-7445.AM2018-5482.
 16. Shilpa Dutta, Samuel Tanner, Frédéric Gradek, Virginie Driffort, Sébastien Roger, Katri Selander and **Sadanandan E. Velu** (Co-corresponding author), Wayne Brouillette, Discovery and Evaluation of nNav1.5 Sodium Channel Blockers with Potent Cell Invasion Inhibitory Activity in Breast Cancer Cells, **Bioorganic and Medicinal Chemistry**, 26, 2428-2436 (2018). PubMed PMID: 29673714, PubMed PMCID: PMC5935567, DOI: doi.org/10.1016/j.bmc.2018.04.003.
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 18. Qiong Zhang, Bhavitavya Nijampatnam, Zhang Hua, Thao Nguyen, Jing Zou, Xia Cai, Suzanne M. Michalek, **Sadanandan E. Velu** (Co-corresponding author) and Hui Wu, Structure-Based Discovery of Small Molecule Inhibitors of Cariogenic Virulence, **Scientific Reports**, 7, 1-10 (2017). PubMed PMID: 28729722, PubMed PMCID: PMC5519559, DOI: 10.1038/s41598-017-06168-1.
 19. Bing Xue, Wei Wang, Jiang-Jiang Qin, Bhavitavya Nijampatnam, Srinivasan Murugesan, Veronika Kozlovskaya, Ruiwen Zhang, **Sadanandan E. Velu** (Co-corresponding author) and Eugenia Kharlampieva, Highly efficient delivery of potent anticancer iminoquinone derivative by multilayer hydrogel cubes, **Acta Biomaterialia**, 58, 386-398 (2017). PubMed PMID: 28583901, PubMed PMCID: PMC5736006, DOI: 10.1016/j.actbio.2017.06.004.
 20. Jouko Sandholm, Jaakko Lehtimäki, Tamiko Ishizu, **Sadanandan E. Velu**, Jeremy Clark, Pirkko Härkönen, Arja Jukkola-Vuorinen, Alekski Schrey, Kevin W. Harris, Johanna M. Tuomela and Katri S. Selander, Toll- like receptor 9 expression is associated with breast cancer sensitivity to the growth inhibitory effects of bisphosphonates *in vitro* and *in vivo*, **Oncotarget**, 7, 87373-87389 (2016). PubMed PMID: 27888633, PubMed PMCID: PMC5349995, DOI: 10.18632/oncotarget.13570.

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22. M. Ryan Smith, Praveen K. Vayalil, Fen Zhou, Gloria A. Benavides, Reena R. Beggs, Hafez Golzarian, Bhavitavya Nijampatnam, Patsy G. Oliver, Robin A.J. Smith, Michael P. Murphy, **Sadanandan E. Velu** and Aimee Landar, Mitochondrial thiol modification by a targeted electrophile inhibits metabolism in breast adenocarcinoma cells by inhibiting enzyme activity and protein levels, **Redox Biology**, 8, 136-48 (2016). PubMed PMID: 26774751, PubMed PMCID: PMC4732023, DOI: 10.1016/j.redox.2016.01.002.
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25. Annette Ehrhardt, W. Joon Chung, Louise C. Pyle, Wei Wang, Krzysztof Nowotarski, Cory M. Mulvihill, Mohabir Ramjeesingh, Jeong Hong, **Sadanandan E. Velu**, Hal A. Lewis, Shane Atwell, Steve Aller, Christine E. Bear, Gergely L. Lukacs, Kevin L. Kirk, and Eric J. Sorscher, Channel Gating Regulation by the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) First Cytosolic Loop, **Journal of Biological Chemistry**, 291, 1854-65 (2016). PubMed PMID: 26627831, PubMed PMCID: PMC4722463, DOI: 10.1074/jbc.M115.704809.
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31. 54. Praveen K. Vayalil, Joo-Yeun Oh, Fen Zhou, Anne R. Diers, M. Ryan Smith, Hafez Golzarian, Patsy G. Oliver, Robin A. J. Smith, Michael P. Murphy, **Sadanandan E. Velu** and Aimee Landar, A Novel Class of Mitochondria-Targeted Soft Electrophiles Modifies Mitochondrial Proteins and Inhibits Mitochondrial Metabolism in Breast Cancer Cells through Redox Mechanisms, **PLOS ONE**, 10 (3):e0120460 (2015). PubMed PMID: 25785718, PubMed PMCID: PMC4364723, DOI: 10.1371/journal.pone.0120460.

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