

### **Full List of Peer-Reviewed Publications**

1. Piyasuda Pukkanasut, Shilpa Dutta, Jason Whitt, Parvathy Babu, Osbaldo Lopez-Charcas, Tonantzin Guadalupe Anguheven-Ledezma, Juan Carlos Gomora, Renata Jaskula-Sztul and **Sadanandan E. Velu**, Design, synthesis and evaluation of voltage-gated sodium channel blockers with anti-invasive activities in medullary thyroid cancer, *ACS Medicinal Chemistry Letters*, 16: 766-775 (2025), PubMed PMID: 40365421, PubMed PMCID: PMC12067137, DOI: 10.1021/acsmchemlett.4c00576.
2. Parmanand Ahirwar, Veronika Kozlovskaya, Piyasuda Pukkanasut, Pavel Nikishau, Sarah Nealy, Gregory Harber, Suzanne M. Michalek, Linto Antony, Hui Wu, Eugenia Kharlampieva and **Sadanandan E. Velu**, Polymer vesicles for the delivery of inhibitors of cariogenic biofilm, *Dental Materials*, 40:1937-1953, (2024), PubMed PMID: 39317560, PubMed PMCID: PMC11580801, DOI: 10.1016/j.dental.2024.09.006.
3. Piyasuda Pukkanasut, Renata Jaskula-Sztul, Juan Carlos Gomora, and **Sadanandan E. Velu**, Therapeutic Targeting of Voltage-gated Sodium Channel NaV1.7 for Cancer Metastasis, *Frontiers in Pharmacology*, 15: 1416705 (2024), PubMed PMID: 39045054, PubMed PMCID: PMC11263763, DOI: 10.3389/fphar.2024.1416705.
4. Osbaldo Lopez-Charcas, Oumnia Benouna, Roxane Lemoine, Zazil Herrera-Carrillo, Margarita Jacaranda Rosendo-Pineda, Miguel Ramírez-Aragon, Tonantzin Guadalupe Anguheven-Ledezma, Ana Alfaro, Stephanie Chadet, Fabio Ferro, Pierre Besson, Lin-Hua Jiang, **Sadanandan E. Velu**, Sebastien Roger and Juan Carlos Gomora, Gossypol's Blocking Mechanism on Cav3 Calcium Channels and Induction of G<sub>0</sub>/G<sub>1</sub> Cell Cycle Arrest in Colon Cancer Cells, *British Journal of Pharmacology*, 181: 4546-4570 (2024). PubMed PMID: 39081110, PubMed PMCID: PMC11613961, DOI: 10.1111/bph.16497.
5. Edwin M. Rojas, Hua Zhang, **Sadanandan E. Velu**, and Hui Wu, Tetracyclic homoisoflavanoid (+)-brazilin: A new inhibitor of c-di-AMP production by *Streptococcus mutans*, *Microbiology Spectrum*, 12 (5): e0241823 (2024), PubMed PMID: 38591917, PubMed PMCID: PMC11064632, DOI: 10.1128/spectrum.02418-23.
6. Parmanand Ahirwar, Veronika Kozlovskaya, Bhavitavya Nijampatnam, Edwin M. Rojas, Piyasuda Pukkanasut, Daniel Inman, Maksim Dolmat, Anna C. Law, Norbert Schormann, Champion Deivanayagam, Gregory J. Harber, Suzanne M. Michalek, Hui Wu, Eugenia Kharlampieva and **Sadanandan E. Velu**, Hydrogel encapsulated biofilm inhibitors abrogate the cariogenic activity of *Streptococcus mutans*, *Journal of Medicinal Chemistry*, 66, 7909-7925 (2023), PubMed PMID: 37285134, PubMed PMCID: PMC11188996, DOI: 10.1021/acs.jmedchem.3c00272.
7. Piyasuda Pukkanasut, Jason Whitt, Rachael Guenter, Shannon E Lynch, Carlos Gallegos, Margarita Jacaranda Rosendo-Pineda, Juan Carlos Gomora, Herbert Chen, Diana Lin, Anna Sorace, Renata Jaskula-Sztul and **Sadanandan E. Velu**, Voltage-gated Sodium Channel NaV1.7 Inhibitors with Potent Anticancer Activities in Medullary Thyroid Cancer Cells, *Cancers*, 15(10), 2806 (2023), PubMed PMCID: PMC10216335, DOI: 10.3390/cancers15102806.
8. Osbaldo Lopez-Charcas, Lucile Poisson, Oumnia Benouna, Roxane Lemoine, Stéphanie Chadet, Adrien Pétereau, 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.
9. 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.

10. 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 Applied Bio Materials**, 4: 6244–6255 (2021), DOI: 10.1021/acsabm.1c00552.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
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22. 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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25. Bing Xue, Wei Wang, Jiang-Jiang Qin, Bhavitavya Nijampatnam, Srinivasan Murugesan, Veronika Kozlovskaya, Ruiwen Zhang, **Sadanandan E. Velu** (Co-corresponding author) and EugeniaKharlampieva, 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.
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