

Prof. S. Gründer

Data as of January 21, 2026

Total citations: >6400

Papers with ≥ 100 citations: 16

h-Index: 37

(Data based on Clarivate Analytics)

Original Publications

- (78) Qin L, Komarov N, Fritsch C, Sprecher SG, **Gründer S***, Wiemuth D
The Drosophila DEG/ENaC PPK12 is a Na⁺ leak channel with a low Na⁺ affinity.
Sci. Rep. 15(1), 27457 (2025)
- (77) Kuspiel S, Schilling M, Weiß F, Wieseahn A, Strüver L, Schmalzing G, Wiemuth D*, **Gründer S***
The secreted protein PCYOX1L controls surface expression of acid-sensing ion channel 1a.
Sci. Adv., 11(30), eadw4064 (2025)
- (76) Lee CH, Lin JH, Lin SH, Chang CT, Wu YW, Bewick G, Banks RW, **Gründer S**, Hochgeschwender U, Chen CC
A role for proprioceptors in sngception.
Sci. Adv., 11(5), eabc5219 (2025)
- (75) Ortega-Ramírez A, Albani S, Bachmann M, Schmidt A, Pinoé-Schmidt M, Assmann M, Augustinowski K, Rossetti G, and **Gründer S***
A conserved peptide-binding pocket in HyNaC/ASIC ion channels.
Proc. Natl. Acad. Sci. USA 121(41), e2409097121 (2024)
- (74) Pissas K-P, **Gründer S***, and Tian Y
Functional expression of the proton sensors ASIC1a, TMEM206, and OGR1 together with BK_{Ca} channels is associated with cell volume changes and cell death under strongly acidic conditions in DAOY medulloblastoma cells.
Pflügers Arch., 476(6), 923-937 (2024)
- (73) Pissas K-P, Schilling M, Tian Y, and **Gründer S***
Melatonin alters the excitability of mouse cerebellar granule neurons by inhibiting voltage-gated sodium, potassium, and calcium channels.
J. Pineal Res., 76(1): e12919 (2024)
- (72) Pissas K-P, Schilling M, Tian Y, and **Gründer S***
Functional characterization of acid-sensing ion channels in the cerebellum-originating medulloblastoma cell line DAOY and in cerebellar granule neurons.
Pflügers Arch., 475(9), 1073-1087 (2023)

- (71) Fischer L, Schmidt A, Dopychai A, Joussen S, Joeres N, Oslender-Bujotzek A, Schmalzing G, and **Gründer S***
Physiologically relevant acid-sensing ion channel (ASIC) 2a/3 heteromers have a 1:2 stoichiometry.
Commun. Biol., 6(1): 701 (2023)
- (70) Hawashin A, Brakmann IC, Tian Y, **Gründer S***, and Ortega-Ramírez A
Modulation of Acid-Sensing Ion Channels by Tannic Acid and Green Tea via a Membrane-Mediated Mechanism.
ACS Chem. Neurosci., 14(14), 2487-2498 (2023)
- (69) Aguilar-Camacho JM, Foreman K, Jaimes-Becerra, A, Aharoni R, **Gründer S***, and Moran Y*
Functional analysis in a model sea anemone reveals phylogenetic complexity and a role in cnidocyte discharge of DEG/ENaC ion channels.
Commun. Biol., 6(1), 17 (2023)
- (68) Cortés Franco KD, Brakmann IC, Feoktistova M, Panayotova-Dimitrova D, **Gründer S***, and Tian, Y
Aggressive migration in acidic pH of a glioblastoma cancer stem cell line in vitro is independent of ASIC and $K_{Ca}3.1$ ion channels, but involves phosphoinositide 3-kinase.
Pflügers Arch., 475(3), 405-416 (2023)
- (67) Clusmann J, Franco KC, Suárez DAC, Katona I, Minguez MG, Boersch N, Pissas KP, Vanek J, Tian Y, and **Gründer S***
Acidosis induces RIPK1-dependent death of glioblastoma stem cells via acid-sensing ion channel 1a.
Cell Death Dis., 13(8), 702 (2022)
- (66) Neupane B, Pradhan K, Ortega-Ramirez AM, Aidery P, Kucikas V, Marks M, van Zandvoort MAMJ, Klingel K, Witte KK, **Gründer S**, Marx N, and Gramlich, M
Personalized Medicine Approach in a DCM Patient with LMNA Mutation Reveals Dysregulation of mTOR Signaling.
J. Pers. Med., 12(7), 1149 (2022)
- (65) Leisle L, Margreiter M, Ortega-Ramírez A, Cleuvers E, Bachmann M, Rossetti G, and **Gründer S***
Dynorphin Neuropeptides Decrease Apparent Proton Affinity of ASIC1a by Occluding the Acidic Pocket.
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- (64) Neuhoof A, Tian Y, Reska A, Falkenburger BH, and **Gründer S***
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Front. Cell. Neurosci., 15, 668008 (2021)
- (63) Kuspiel K, Wiemuth D, and **Gründer S***
The Neuropeptide Nocistatin Is Not a Direct Agonist of Acid-Sensing Ion Channel 1a (ASIC1a).
Biomolecules, 11(4), 571 (2021)
- (62) Bachmann M, Ortega-Ramírez A, Leisle L, and **Gründer S***
Efficient expression of a cnidarian peptide-gated ion channel in mammalian cells.
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- (61) Tian Y, Korn P, Tripathi P, Komnig D, Wiemuth D, Nikouee A, Classen A, Bolm C, Falkenburger BH, Lüscher B, and **Gründer S***
The mono-ADP-ribosyltransferase ARTD10 regulates the voltage-gated K⁺ channel Kv1.1 through protein kinase C delta.
BMC Biology, 18, 143 (2020)
- (60) Schmidt A, Joussen S, Hausmann R, **Gründer S** and Wiemuth D*
Bile acids are potent inhibitors of rat P2X2 receptors.
Purinergic Signal. 15(2), 213-221 (2019)
- (59) Vyvers, Schmidt A*, Wiemuth D and **Gründer S***
Screening of 109 neuropeptides on ASICs reveals no direct agonists and dynorphin A, YFMRFamide and endomorphin-1 as modulators.
Sci. Rep. 8(1), 18000 (2018)
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The conoRFamide RPRFa stabilizes the open conformation of Acid-Sensing Ion Channel 3 via the nonproton ligand sensing domain.
Mol. Pharmacol. 94(4), 1114-1124
- (56) Lehmke L, Coburn M, Möller M, Blaumeiser-Debarry R, Lenzig P, Wiemuth D and **Gründer S***
Inhalational anesthetics accelerate desensitization of acid-sensing ion channels.
Neuropharmacol. 135, 496-505 (2018)
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Amphiphilic substances modulate Deg/ENaCs by modifying membrane structure and density.
Biophysical. J. 114, 1321-1335 (2018)
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Mol. Pharmacol., 92(6), 665-675 (2017)
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Sci. Rep. 7, 13674 (2017)
- (52) Reimers C, Lee C-H, Kalbacher H, Tian Y, Hung C-H, Schmidt A, Prokop L, Käuferstein S, Mebs D, Cheng C-C and **Gründer S***
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- (49) Joeres N, Augustinowski K, Neuhoof A, Assmann M and **Gründer S***
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Sci. Rep. 6, 27647 (2016)
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Sci. Rep. 5, 18242 (2015)
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Reviews

- (9) **Gründer S***, Vanek J, Pissas K-P
Acid-sensing ion channels and downstream signalling in cancer cells: is there a mechanistic link?
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- (8) **Gründer S***, Ortega-Ramirez AM, Jékely G
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J. Exp. Biol. 221: 151167, (2018)
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