John E Sondek

List of Publications by Year in descending order

103 papers	11,017 citations	41344 49 h-index	36028 97 g-index
109 all docs	109 docs citations	109 times ranked	10063 citing authors

#	Article	IF	Citations
1	Fluorogenic XY-69 in Lipid Vesicles for Measuring Activity of Phospholipase C Isozymes. Methods in Molecular Biology, 2021, 2251, 225-236.	0.9	2
2	Designer proteins that competitively inhibit GÎ±q by targeting its effector site. Journal of Biological Chemistry, 2021, 297, 101348.	3.4	7
3	A High-Throughput Assay to Identify Allosteric Inhibitors of the PLC-Î³ Isozymes Operating at Membranes. Biochemistry, 2020, 59, 4029-4038.	2.5	5
4	Multiplexed GTPase and GEF biosensor imaging enables network connectivity analysis. Nature Chemical Biology, 2020, 16, 826-833.	8.0	25
5	Spatiotemporal dynamics of GEF-H1 activation controlled by microtubule- and Src-mediated pathways. Journal of Cell Biology, 2019, 218, 3077-3097.	5.2	38
6	Structural basis for the activation of PLC-Î³ isozymes by phosphorylation and cancer-associated mutations. ELife, 2019, 8, .	6.0	52
7	Calcium-induced structural rearrangements release autoinhibition in the Rap-GEF CalDAG-GEFI. Journal of Biological Chemistry, 2018, 293, 8521-8529.	3.4	16
8	A membrane-associated, fluorogenic reporter for mammalian phospholipase C isozymes. Journal of Biological Chemistry, 2018, 293, 1728-1735.	3.4	17
9	TIR-only protein RBA1 recognizes a pathogen effector to regulate cell death in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2053-E2062.	7.1	146
10	Novel mutations in RASGRP2, which encodes CalDAG-GEFI, abrogate Rap1 activation, causing platelet dysfunction. Blood, 2016, 128, 1282-1289.	1.4	68
11	Potent and Selective Peptide-based Inhibition of the G Protein GÎ±q. Journal of Biological Chemistry, 2016, 291, 25608-25616.	3.4	26
12	A negative-feedback loop regulating ERK1/2 activation and mediated by RasGPR2 phosphorylation. Biochemical and Biophysical Research Communications, 2016, 474, 193-198.	2.1	11
13	The experimental power of FR900359 to study Gq-regulated biological processes. Nature Communications, 2015, 6, 10156.	12.8	282
14	Membrane-induced Allosteric Control of Phospholipase C-Î² Isozymes. Journal of Biological Chemistry, 2014, 289, 29545-29557.	3.4	33
15	A Cell-Permeable Inhibitor to Trap GÎ±q Proteins in the Empty Pocket Conformation. Chemistry and Biology, 2014, 21, 890-902.	6.0	47
16	Autoinhibition and Phosphorylation-Induced Activation of Phospholipase C-Î³ Isozymes. Biochemistry, 2013, 52, 4810-4819.	2.5	35
17	Small Molecule Inhibitors of Phospholipase C from a Novel High-throughput Screen*. Journal of Biological Chemistry, 2013, 288, 5840-5848.	3.4	29
18	TheSalmonellaTyphimurium effector SteC inhibits Cdc42-mediated signaling through binding to the exchange factor Cdc24 inSaccharomyces cerevisiae. Molecular Biology of the Cell, 2012, 23, 4430-4443.	2.1	14

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19	Fluorescent Phosphatidylinositol 4,5-Bisphosphate Derivatives with Modified 6-Hydroxy Group as Novel Substrates for Phospholipase C. Biochemistry, 2012, 51, 5300-5306.	2.5	8
20	AvrRpm1 Missense Mutations Weakly Activate RPS2-Mediated Immune Response in Arabidopsis thaliana. PLoS ONE, 2012, 7, e42633.	2.5	25
21	The Phospholipase C Isozymes and Their Regulation. Sub-Cellular Biochemistry, 2012, 58, 61-94.	2.4	149
22	Direct Activation of Human Phospholipase C by Its Well Known Inhibitor U73122. Journal of Biological Chemistry, 2011, 286, 12407-12416.	3.4	53
23	A Fluorogenic, Small Molecule Reporter for Mammalian Phospholipase C Isozymes. ACS Chemical Biology, 2011, 6, 223-228.	3.4	32
24	Mechanism of Activation and Inactivation of Gq/Phospholipase C-Î² Signaling Nodes. Chemical Reviews, 2011, 111, 6120-6129.	47.7	46
25	A PLCÎ²/PI3KÎ³-GSK3 Signaling Pathway Regulates Cofilin Phosphatase Slingshot2 and Neutrophil Polarization and Chemotaxis. Developmental Cell, 2011, 21, 1038-1050.	7.0	72
26	SmgGDS Is a Guanine Nucleotide Exchange Factor That Specifically Activates RhoA and RhoC. Journal of Biological Chemistry, 2011, 286, 12141-12148.	3.4	56
27	High-Throughput Fluorescence Polarization Assay for the Enzymatic Activity of GTPase-Activating Protein of ADP-Ribosylation Factor (ARFGAP). Journal of Biomolecular Screening, 2011, 16, 717-723.	2.6	11
28	Mechanism of Phosphorylation-induced Activation of Phospholipase C-Î³ Isozymes. Journal of Biological Chemistry, 2010, 285, 35836-35847.	3.4	96
29	Kinetic Scaffolding Mediated by a Phospholipase Câ€“Î² and G _q Signaling Complex. Science, 2010, 330, 974-980.	12.6	209
30	Structural Features of RhoGEFs. , 2010, , 1843-1847.		0
31	High-Throughput Screening for Small-Molecule Inhibitors of LARG-Stimulated RhoA Nucleotide Binding via a Novel Fluorescence Polarization Assay. Journal of Biomolecular Screening, 2009, 14, 161-172.	2.6	42
32	Phospholipase C isozymes as effectors of Ras superfamily GTPases. Journal of Lipid Research, 2009, 50, S243-S248.	4.2	39
33	Structure and Function of Vps15 in the Endosomal G Protein Signaling Pathway[,]. Biochemistry, 2009, 48, 6390-6401.	2.5	30
34	Prediction of Proteinâ€“Protein Interfaces on G-Protein Î² Subunits Reveals a Novel Phospholipase C Î²2 Binding Domain. Journal of Molecular Biology, 2009, 392, 1044-1054.	4.2	19
35	Crystal structure of the multifunctional Gβ5â€“RGS9 complex. Nature Structural and Molecular Biology, 2008, 15, 155-162.	8.2	97
36	General and Versatile Autoinhibition of PLC Isozymes. Molecular Cell, 2008, 31, 383-394.	9.7	144

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37	Role of the C-Terminal SH3 Domain and N-Terminal Tyrosine Phosphorylation in Regulation of Tim and Related Dbl-Family Proteins. Biochemistry, 2008, 47, 6827-6839.	2.5	36
38	Dual Activation of Phospholipase C-Ïµ by Rho and Ras GTPases. Journal of Biological Chemistry, 2008, 283, 29690-29698.	3.4	40
39	Activation of Human Phospholipase C-Î·2 by GÎ²Î³. Biochemistry, 2008, 47, 4410-4417.	2.5	36
40	Activation of Human PLCâ€eta2 by Gbetagamma. FASEB Journal, 2008, 22, 728.3.	0.5	0
41	Structural studies of RGS9/GÎ²5. FASEB Journal, 2008, 22, 539.2.	0.5	0
42	GÎ±q Directly Activates p63RhoGEF and Trio via a Conserved Extension of the Dbl Homology-associated Pleckstrin Homology Domain. Journal of Biological Chemistry, 2007, 282, 29201-29210.	3.4	132
43	Type III Effector Activation via Nucleotide Binding, Phosphorylation, and Host Target Interaction. PLoS Pathogens, 2007, 3, e48.	4.7	89
44	Auto-inhibition of the Dbl Family Protein Tim by an N-terminal Helical Motif. Journal of Biological Chemistry, 2007, 282, 13813-13823.	3.4	39
45	Structural Insights into Fibronectin Type III Domain-mediated Signaling. Journal of Molecular Biology, 2007, 367, 303-309.	4.2	42
46	The DH and PH Domains of Trio Coordinately Engage Rho GTPases for their Efficient Activation. Journal of Molecular Biology, 2007, 368, 1307-1320.	4.2	73
47	Release of autoinhibition of ASEF by APC leads to CDC42 activation and tumor suppression. Nature Structural and Molecular Biology, 2007, 14, 814-823.	8.2	83
48	REGULATION OF PHOSPHOLIPASE C ISOZYMES BY RAS SUPERFAMILY GTPASES. Annual Review of Pharmacology and Toxicology, 2006, 46, 355-379.	9.4	124
49	The Dbs PH domain contributes independently to membrane targeting and regulation of guanine nucleotide-exchange activity. Biochemical Journal, 2006, 400, 563-572.	3.7	42
50	Crystal structure of Rac1 bound to its effector phospholipase C-Î²2. Nature Structural and Molecular Biology, 2006, 13, 1135-1140.	8.2	122
51	Regulation of PLCÎ² Isoforms by Rac. Methods in Enzymology, 2006, 406, 272-280.	1.0	2
52	Quantification of Isozymeâ€Specific Activation of Phospholipase Câ€Î²2 by Rac GTPases and Phospholipase Câ€É› by Rho GTPases in an Intact Cell Assay System. Methods in Enzymology, 2006, 406, 489-499.	1.0	25
53	Direct Activation of Purified Phospholipase C Epsilon by RhoA Studied in Reconstituted Phospholipid Vesicles. Methods in Enzymology, 2006, 406, 260-271.	1.0	5
54	Molecular cloning and characterization of PLCâ€Î·2. FASEB Journal, 2006, 20, A693.	0.5	0

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55	Molecular cloning and characterization of PLC-Î·2. Biochemical Journal, 2005, 391, 667-676.	3.7	84
56	GEF means go: turning on RHO GTPases with guanine nucleotide-exchange factors. Nature Reviews Molecular Cell Biology, 2005, 6, 167-180.	37.0	1,483
57	A Steric-Inhibition Model for Regulation of Nucleotide Exchange via the Dock180 Family of GEFs. Current Biology, 2005, 15, 371-377.	3.9	96
58	Structure of GÎ±i1 Bound to a GDP-Selective Peptide Provides Insight into Guanine Nucleotide Exchange. Structure, 2005, 13, 1069-1080.	3.3	74
59	Larger than Dbl: new structural insights into RhoA activation. Trends in Biochemical Sciences, 2005, 30, 163-165.	7.5	41
60	Structural and Biochemical Characterization of CIB1 Delineates a New Family of EF-hand-containing Proteins. Journal of Biological Chemistry, 2005, 280, 8407-8415.	3.4	95
61	The Pseudomonas syringae effector AvrRpt2 cleaves its C-terminally acylated target, RIN4, from Arabidopsis membranes to block RPM1 activation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6496-6501.	7.1	250
62	A Cdc42 Mutant Specifically Activated by Intersectinâ€. Biochemistry, 2005, 44, 13282-13290.	2.5	8
63	Requirement For C-terminal Sequences in Regulation of Ect2 Guanine Nucleotide Exchange Specificity and Transformation. Journal of Biological Chemistry, 2004, 279, 25226-25233.	3.4	49
64	Inhibition of NF-ÎºB Activity by IÎºBÎ² in Association with Îº B-Ras. Molecular and Cellular Biology, 2004, 24, 3048-3056.	2.3	46
65	RhoA Activates Purified Phospholipase C-Ïµ by a Guanine Nucleotide-dependent Mechanism. Journal of Biological Chemistry, 2004, 279, 47992-47997.	3.4	54
66	Rac1b, a tumor associated, constitutively active Rac1 splice variant, promotes cellular transformation. Oncogene, 2004, 23, 9369-9380.	5.9	157
67	PH domain of ELMO functions in trans to regulate Rac activation via Dock180. Nature Structural and Molecular Biology, 2004, 11, 756-762.	8.2	121
68	Crystal Structure of the DH/PH Fragment of Dbs without Bound GTPase. Structure, 2004, 12, 1079-1086.	3.3	30
69	Crystal Structures of the Type III Effector Protein AvrPphF and Its Chaperone Reveal Residues Required for Plant Pathogenesis. Structure, 2004, 12, 1669-1681.	3.3	73
70	Phagocytosis of Apoptotic Cells Is Regulated by a UNC-73/TRIO-MIG-2/RhoG Signaling Module and Armadillo Repeats of CED-12/ELMO. Current Biology, 2004, 14, 2208-2216.	3.9	185
71	Role of the pleckstrin homology domain in intersectin-L Dbl homology domain activation of Cdc42 and signaling. Biochimica Et Biophysica Acta - Molecular Cell Research, 2003, 1640, 61-68.	4.1	18
72	Direct Activation of Phospholipase C-Ïµ by Rho. Journal of Biological Chemistry, 2003, 278, 41253-41258.	3.4	100

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73	Loss of Phosphatidylinositol 3-Phosphate Binding by the C-terminal Tiam-1 Pleckstrin Homology Domain Prevents in Vivo Rac1 Activation without Affecting Membrane Targeting. Journal of Biological Chemistry, 2003, 278, 11457-11464.	3.4	59
74	Tuba, a Novel Protein Containing Bin/Amphiphysin/Rvs and Dbl Homology Domains, Links Dynamin to Regulation of the Actin Cytoskeleton. Journal of Biological Chemistry, 2003, 278, 49031-49043.	3.4	161
75	Multifunctional Roles for the PH Domain of Dbs in Regulating Rho GTPase Activation. Journal of Biological Chemistry, 2003, 278, 18393-18400.	3.4	76
76	The Pleckstrin Homology Domain of Phospholipase C-Î²2 as an Effector Site for Rac. Journal of Biological Chemistry, 2003, 278, 21099-21104.	3.4	95
77	Established and Emerging Fluorescence-Based Assays for G-Protein Function: Ras-Superfamily GTPases. Combinatorial Chemistry and High Throughput Screening, 2003, 6, 409-418.	1.1	36
78	Structural Features of RhoGEFs. , 2003, , 751-755.		0
79	Functional Analysis of Cdc42 Residues Required for Guanine Nucleotide Exchange. Journal of Biological Chemistry, 2002, 277, 50893-50898.	3.4	30
80	RhoGEF Specificity Mutants Implicate RhoA as a Target for Dbs Transforming Activity. Molecular and Cellular Biology, 2002, 22, 6895-6905.	2.3	27
81	Assays of Complex Formation between RGS Protein GÎ³ Subunit-like Domains and GÎ² Subunits. Methods in Enzymology, 2002, 344, 702-723.	1.0	7
82	Molecular Basis of CIB Binding to the Integrin Î±IIb Cytoplasmic Domain. Journal of Biological Chemistry, 2002, 277, 28877-28883.	3.4	53
83	Structural determinants for GoLoco-induced inhibition of nucleotide release by GÎ± subunits. Nature, 2002, 416, 878-881.	27.8	252
84	Tiam1 mediates Ras activation of Rac by a PI(3)K-independent mechanism. Nature Cell Biology, 2002, 4, 621-625.	10.3	288
85	A unique fold of phospholipase C-Î² mediates dimerization and interaction with GÎ±q. Nature Structural Biology, 2002, 9, 32-36.	9.7	93
86	Structural basis for the selective activation of Rho GTPases by Dbl exchange factors. Nature Structural Biology, 2002, 9, 468-475.	9.7	190
87	A crystallographic view of interactions between Dbs and Cdc42: PH domain-assisted guanine nucleotide exchange. EMBO Journal, 2002, 21, 1315-1326.	7.8	198
88	Molecular basis for Rac1 recognition by guanine nucleotide exchange factors. Nature Structural Biology, 2001, 8, 1037-1041.	9.7	84
89	GÎ³-like (ggl) domains: new frontiers in g-protein signaling and Î²-propeller scaffolding22Abbreviations: DEP, dishevelled/EGL-10/pleckstrin-related domain; DH, dbl-homology domain; GAP, guanosine triphosphatase-activating protein; GEF, guanine nucleotide exchange factor; GGL, G-gamma-like; GIRK, G-protein-gated inwardly rectifying potassium channel; GPCR, G-protein-coupled receptor; G protein, guanine nucleotide binding protein; GTPase, guanosine triphosphatase; mAChR, muscarinic acetylcholine receptor; MAPK. Biochemical Pharmacology, 2001, 61, 1329-1337.	4.4	117
90	Quantitative Analysis of the Effect of Phosphoinositide Interactions on the Function of Dbl Family Proteins. Journal of Biological Chemistry, 2001, 276, 45868-45875.	3.4	83

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91	Leukemia-associated Rho Guanine Nucleotide Exchange Factor, a Dbl Family Protein Found Mutated in Leukemia, Causes Transformation by Activation of RhoA. Journal of Biological Chemistry, 2001, 276, 27145-27151.	3.4	112
92	Crystal structure of Rac1 in complex with the guanine nucleotide exchange region of Tiam1. Nature, 2000, 408, 682-688.	27.8	332
93	Calcium-dependent properties of CIB binding to the integrin Î±IIb cytoplasmic domain and translocation to the platelet cytoskeleton. Biochemical Journal, 1999, 342, 729-735.	3.7	67
94	Calcium-dependent properties of CIB binding to the integrin Î±IIb cytoplasmic domain and translocation to the platelet cytoskeleton. Biochemical Journal, 1999, 342, 729.	3.7	38
95	The 2.0 Ã... crystal structure of a heterotrimeric G protein. Nature, 1996, 379, 311-319.	27.8	1,159
96	Crystal structure of a GA protein Î²Î³dimer at 2.1 Ã... resolution. Nature, 1996, 379, 369-374.	27.8	770
97	The emerging role of insertions and deletions in protein engineering. Current Opinion in Biotechnology, 1995, 6, 387-393.	6.6	46
98	An Effector Site That Stimulates G-protein GTPase in Photoreceptors. Journal of Biological Chemistry, 1995, 270, 14319-14324.	3.4	67
99	Accommodation of insertion mutations on the surface and in the interior of staphylococcal nuclease. Protein Science, 1994, 3, 391-401.	7.6	18
100	GTPase mechanism of Gproteins from the 1.7-Ã... crystal structure of transducin Î± - GDP AlFâ^'4. Nature, 1994, 372, 276-279.	27.8	594
101	Structural and energetic differences between insertions and substitutions in staphylococcal nuclease. Proteins: Structure, Function and Bioinformatics, 1992, 13, 132-140.	2.6	34
102	Accommodation of single amino acid insertions by the native state of staphylococcal nuclease. Proteins: Structure, Function and Bioinformatics, 1990, 7, 299-305.	2.6	83
103	Dynamics of allosteric regulation of the phospholipase C-Î³ isozymes upon recruitment to membranes. ELife, 0, 11, .	6.0	4