

John E Sondek

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103
papers

9,547
citations

48
h-index

97
g-index

109
ext. papers

10,358
ext. citations

9.7
avg, IF

5.7
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 103 | GEF means go: turning on RHO GTPases with guanine nucleotide-exchange factors. <i>Nature Reviews Molecular Cell Biology</i> , 2005 , 6, 167-80 | 48.7 | 1316 |
| 102 | The 2.0 Å crystal structure of a heterotrimeric G protein. <i>Nature</i> , 1996 , 379, 311-9 | 50.4 | 1054 |
| 101 | Crystal structure of a G-protein beta gamma dimer at 2.1Å resolution. <i>Nature</i> , 1996 , 379, 369-74 | 50.4 | 714 |
| 100 | GTPase mechanism of Gproteins from the 1.7-Å crystal structure of transducin alpha-GDP-AIF-4. <i>Nature</i> , 1994 , 372, 276-9 | 50.4 | 560 |
| 99 | Crystal structure of Rac1 in complex with the guanine nucleotide exchange region of Tiam1. <i>Nature</i> , 2000 , 408, 682-8 | 50.4 | 310 |
| 98 | Tiam1 mediates Ras activation of Rac by a PI(3)K-independent mechanism. <i>Nature Cell Biology</i> , 2002 , 4, 621-5 | 23.4 | 258 |
| 97 | Structural determinants for GoLoco-induced inhibition of nucleotide release by Galpha subunits. <i>Nature</i> , 2002 , 416, 878-81 | 50.4 | 218 |
| 96 | The <i>Pseudomonas syringae</i> effector AvrRpt2 cleaves its C-terminally acylated target, RIN4, from Arabidopsis membranes to block RPM1 activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 6496-501 | 11.5 | 197 |
| 95 | The experimental power of FR900359 to study Gq-regulated biological processes. <i>Nature Communications</i> , 2015 , 6, 10156 | 17.4 | 190 |
| 94 | A crystallographic view of interactions between Dbs and Cdc42: PH domain-assisted guanine nucleotide exchange. <i>EMBO Journal</i> , 2002 , 21, 1315-26 | 13 | 182 |
| 93 | Structural basis for the selective activation of Rho GTPases by Dbl exchange factors. <i>Nature Structural Biology</i> , 2002 , 9, 468-75 | | 172 |
| 92 | Phagocytosis of apoptotic cells is regulated by a UNC-73/TRIO-MIG-2/RhoG signaling module and armadillo repeats of CED-12/ELMO. <i>Current Biology</i> , 2004 , 14, 2208-16 | 6.3 | 168 |
| 91 | Kinetic scaffolding mediated by a phospholipase C-beta and Gq signaling complex. <i>Science</i> , 2010 , 330, 974-80 | 33.3 | 158 |
| 90 | Rac1b, a tumor associated, constitutively active Rac1 splice variant, promotes cellular transformation. <i>Oncogene</i> , 2004 , 23, 9369-80 | 9.2 | 146 |
| 89 | Tuba, a novel protein containing bin/amphiphysin/Rvs and Dbl homology domains, links dynamin to regulation of the actin cytoskeleton. <i>Journal of Biological Chemistry</i> , 2003 , 278, 49031-43 | 5.4 | 140 |
| 88 | General and versatile autoinhibition of PLC isozymes. <i>Molecular Cell</i> , 2008 , 31, 383-94 | 17.6 | 127 |
| 87 | Regulation of phospholipase C isozymes by ras superfamily GTPases. <i>Annual Review of Pharmacology and Toxicology</i> , 2006 , 46, 355-79 | 17.9 | 112 |

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| 86 | Ggamma-like (GGL) domains: new frontiers in G-protein signaling and beta-propeller scaffolding. <i>Biochemical Pharmacology</i> , 2001 , 61, 1329-37 | 6 | 111 |
| 85 | The phospholipase C isozymes and their regulation. <i>Sub-Cellular Biochemistry</i> , 2012 , 58, 61-94 | 5.5 | 107 |
| 84 | Galphaq directly activates p63RhoGEF and Trio via a conserved extension of the Dbl homology-associated pleckstrin homology domain. <i>Journal of Biological Chemistry</i> , 2007 , 282, 29201-10 | 5.4 | 106 |
| 83 | Crystal structure of Rac1 bound to its effector phospholipase C-beta2. <i>Nature Structural and Molecular Biology</i> , 2006 , 13, 1135-40 | 17.6 | 102 |
| 82 | PH domain of ELMO functions in trans to regulate Rac activation via Dock180. <i>Nature Structural and Molecular Biology</i> , 2004 , 11, 756-62 | 17.6 | 100 |
| 81 | Leukemia-associated Rho guanine nucleotide exchange factor, a Dbl family protein found mutated in leukemia, causes transformation by activation of RhoA. <i>Journal of Biological Chemistry</i> , 2001 , 276, 27145-51 | 5.4 | 100 |
| 80 | Crystal structure of the multifunctional Gbeta5-RGS9 complex. <i>Nature Structural and Molecular Biology</i> , 2008 , 15, 155-62 | 17.6 | 88 |
| 79 | The pleckstrin homology domain of phospholipase C-beta2 as an effector site for Rac. <i>Journal of Biological Chemistry</i> , 2003 , 278, 21099-104 | 5.4 | 88 |
| 78 | Direct activation of phospholipase C-epsilon by Rho. <i>Journal of Biological Chemistry</i> , 2003 , 278, 41253-8 | 5.4 | 87 |
| 77 | A Steric-inhibition model for regulation of nucleotide exchange via the Dock180 family of GEFs. <i>Current Biology</i> , 2005 , 15, 371-7 | 6.3 | 87 |
| 76 | A unique fold of phospholipase C-beta mediates dimerization and interaction with G alpha q. <i>Nature Structural Biology</i> , 2002 , 9, 32-6 | | 85 |
| 75 | TIR-only protein RBA1 recognizes a pathogen effector to regulate cell death in. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E2053-E2062 | 11.5 | 83 |
| 74 | Mechanism of phosphorylation-induced activation of phospholipase C-gamma isozymes. <i>Journal of Biological Chemistry</i> , 2010 , 285, 35836-47 | 5.4 | 83 |
| 73 | Structural and biochemical characterization of CIB1 delineates a new family of EF-hand-containing proteins. <i>Journal of Biological Chemistry</i> , 2005 , 280, 8407-15 | 5.4 | 81 |
| 72 | Molecular basis for Rac1 recognition by guanine nucleotide exchange factors. <i>Nature Structural Biology</i> , 2001 , 8, 1037-41 | | 78 |
| 71 | Quantitative analysis of the effect of phosphoinositide interactions on the function of Dbl family proteins. <i>Journal of Biological Chemistry</i> , 2001 , 276, 45868-75 | 5.4 | 78 |
| 70 | Accommodation of single amino acid insertions by the native state of staphylococcal nuclease. <i>Proteins: Structure, Function and Bioinformatics</i> , 1990 , 7, 299-305 | 4.2 | 76 |
| 69 | Type III effector activation via nucleotide binding, phosphorylation, and host target interaction. <i>PLoS Pathogens</i> , 2007 , 3, e48 | 7.6 | 75 |

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| 68 | Release of autoinhibition of ASEF by APC leads to CDC42 activation and tumor suppression. <i>Nature Structural and Molecular Biology</i> , 2007 , 14, 814-23 | 17.6 | 73 |
| 67 | Multifunctional roles for the PH domain of Dbs in regulating Rho GTPase activation. <i>Journal of Biological Chemistry</i> , 2003 , 278, 18393-400 | 5.4 | 73 |
| 66 | Molecular cloning and characterization of PLC-eta2. <i>Biochemical Journal</i> , 2005 , 391, 667-76 | 3.8 | 68 |
| 65 | Calcium-dependent properties of CIB binding to the integrin IIb cytoplasmic domain and translocation to the platelet cytoskeleton. <i>Biochemical Journal</i> , 1999 , 342, 729-735 | 3.8 | 65 |
| 64 | Structure of Galpha(i1) bound to a GDP-selective peptide provides insight into guanine nucleotide exchange. <i>Structure</i> , 2005 , 13, 1069-80 | 5.2 | 63 |
| 63 | A PLC/P13K/EGSK3 signaling pathway regulates cofilin phosphatase slingshot2 and neutrophil polarization and chemotaxis. <i>Developmental Cell</i> , 2011 , 21, 1038-50 | 10.2 | 61 |
| 62 | Crystal structures of the type III effector protein AvrPphF and its chaperone reveal residues required for plant pathogenesis. <i>Structure</i> , 2004 , 12, 1669-81 | 5.2 | 60 |
| 61 | An effector site that stimulates G-protein GTPase in photoreceptors. <i>Journal of Biological Chemistry</i> , 1995 , 270, 14319-24 | 5.4 | 59 |
| 60 | The DH and PH domains of Trio coordinately engage Rho GTPases for their efficient activation. <i>Journal of Molecular Biology</i> , 2007 , 368, 1307-20 | 6.5 | 58 |
| 59 | Novel mutations in RASGRP2, which encodes CalDAG-GEFI, abrogate Rap1 activation, causing platelet dysfunction. <i>Blood</i> , 2016 , 128, 1282-9 | 2.2 | 57 |
| 58 | Loss of phosphatidylinositol 3-phosphate binding by the C-terminal Tiam-1 pleckstrin homology domain prevents in vivo Rac1 activation without affecting membrane targeting. <i>Journal of Biological Chemistry</i> , 2003 , 278, 11457-64 | 5.4 | 53 |
| 57 | RhoA activates purified phospholipase C-epsilon by a guanine nucleotide-dependent mechanism. <i>Journal of Biological Chemistry</i> , 2004 , 279, 47992-7 | 5.4 | 49 |
| 56 | Molecular basis of CIB binding to the integrin alpha IIb cytoplasmic domain. <i>Journal of Biological Chemistry</i> , 2002 , 277, 28877-83 | 5.4 | 49 |
| 55 | Direct activation of human phospholipase C by its well known inhibitor u73122. <i>Journal of Biological Chemistry</i> , 2011 , 286, 12407-16 | 5.4 | 46 |
| 54 | SmgGDS is a guanine nucleotide exchange factor that specifically activates RhoA and RhoC. <i>Journal of Biological Chemistry</i> , 2011 , 286, 12141-8 | 5.4 | 44 |
| 53 | Requirement for C-terminal sequences in regulation of Ect2 guanine nucleotide exchange specificity and transformation. <i>Journal of Biological Chemistry</i> , 2004 , 279, 25226-33 | 5.4 | 44 |
| 52 | Inhibition of NF-kappaB activity by IkappaBbeta in association with kappaB-Ras. <i>Molecular and Cellular Biology</i> , 2004 , 24, 3048-56 | 4.8 | 43 |
| 51 | The emerging role of insertions and deletions in protein engineering. <i>Current Opinion in Biotechnology</i> , 1995 , 6, 387-93 | 11.4 | 39 |

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| 50 | Mechanism of activation and inactivation of Gq/phospholipase C- β signaling nodes. <i>Chemical Reviews</i> , 2011 , 111, 6120-9 | 68.1 | 38 |
| 49 | High-throughput screening for small-molecule inhibitors of LARG-stimulated RhoA nucleotide binding via a novel fluorescence polarization assay. <i>Journal of Biomolecular Screening</i> , 2009 , 14, 161-72 | | 38 |
| 48 | Auto-inhibition of the Dbl family protein Tim by an N-terminal helical motif. <i>Journal of Biological Chemistry</i> , 2007 , 282, 13813-23 | 5.4 | 37 |
| 47 | The Dbs PH domain contributes independently to membrane targeting and regulation of guanine nucleotide-exchange activity. <i>Biochemical Journal</i> , 2006 , 400, 563-72 | 3.8 | 37 |
| 46 | A cell-permeable inhibitor to trap G $\beta\gamma$ proteins in the empty pocket conformation. <i>Chemistry and Biology</i> , 2014 , 21, 890-902 | | 36 |
| 45 | Larger than Dbl: new structural insights into RhoA activation. <i>Trends in Biochemical Sciences</i> , 2005 , 30, 163-5 | 10.3 | 36 |
| 44 | Phospholipase C isozymes as effectors of Ras superfamily GTPases. <i>Journal of Lipid Research</i> , 2009 , 50 Suppl, S243-8 | 6.3 | 35 |
| 43 | Established and emerging fluorescence-based assays for G-protein function: Ras-superfamily GTPases. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2003 , 6, 409-18 | 1.3 | 35 |
| 42 | Dual activation of phospholipase C-epsilon by Rho and Ras GTPases. <i>Journal of Biological Chemistry</i> , 2008 , 283, 29690-8 | 5.4 | 33 |
| 41 | Structural insights into fibronectin type III domain-mediated signaling. <i>Journal of Molecular Biology</i> , 2007 , 367, 303-9 | 6.5 | 33 |
| 40 | Role of the C-terminal SH3 domain and N-terminal tyrosine phosphorylation in regulation of Tim and related Dbl-family proteins. <i>Biochemistry</i> , 2008 , 47, 6827-39 | 3.2 | 32 |
| 39 | Structural and energetic differences between insertions and substitutions in staphylococcal nuclease. <i>Proteins: Structure, Function and Bioinformatics</i> , 1992 , 13, 132-40 | 4.2 | 31 |
| 38 | Activation of human phospholipase C-eta2 by Gbetagamma. <i>Biochemistry</i> , 2008 , 47, 4410-7 | 3.2 | 30 |
| 37 | Structure and function of Vps15 in the endosomal G protein signaling pathway. <i>Biochemistry</i> , 2009 , 48, 6390-401 | 3.2 | 29 |
| 36 | Crystal structure of the DH/PH fragment of Dbs without bound GTPase. <i>Structure</i> , 2004 , 12, 1078-86 | 5.2 | 29 |
| 35 | Membrane-induced allosteric control of phospholipase C- β isozymes. <i>Journal of Biological Chemistry</i> , 2014 , 289, 29545-57 | 5.4 | 26 |
| 34 | Functional analysis of cdc42 residues required for Guanine nucleotide exchange. <i>Journal of Biological Chemistry</i> , 2002 , 277, 50893-8 | 5.4 | 26 |
| 33 | RhoGEF specificity mutants implicate RhoA as a target for Dbs transforming activity. <i>Molecular and Cellular Biology</i> , 2002 , 22, 6895-905 | 4.8 | 26 |

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| 32 | A fluorogenic, small molecule reporter for mammalian phospholipase C isozymes. <i>ACS Chemical Biology</i> , 2011 , 6, 223-8 | 4.9 | 24 |
| 31 | Quantification of isozyme-specific activation of phospholipase C-beta2 by Rac GTPases and phospholipase C-epsilon by Rho GTPases in an intact cell assay system. <i>Methods in Enzymology</i> , 2006 , 406, 489-99 | 1.7 | 24 |
| 30 | Structural basis for the activation of PLC- β isozymes by phosphorylation and cancer-associated mutations. <i>ELife</i> , 2019 , 8, | 8.9 | 24 |
| 29 | Autoinhibition and phosphorylation-induced activation of phospholipase C- β isozymes. <i>Biochemistry</i> , 2013 , 52, 4810-9 | 3.2 | 22 |
| 28 | Small molecule inhibitors of phospholipase C from a novel high-throughput screen. <i>Journal of Biological Chemistry</i> , 2013 , 288, 5840-8 | 5.4 | 22 |
| 27 | AvrRpm1 missense mutations weakly activate RPS2-mediated immune response in <i>Arabidopsis thaliana</i> . <i>PLoS ONE</i> , 2012 , 7, e42633 | 3.7 | 19 |
| 26 | Prediction of protein-protein interfaces on G-protein beta subunits reveals a novel phospholipase C beta2 binding domain. <i>Journal of Molecular Biology</i> , 2009 , 392, 1044-54 | 6.5 | 18 |
| 25 | Calcium-dependent properties of CIB binding to the integrin β b cytoplasmic domain and translocation to the platelet cytoskeleton. <i>Biochemical Journal</i> , 1999 , 342, 729 | 3.8 | 17 |
| 24 | Role of the pleckstrin homology domain in intersectin-L Dbl homology domain activation of Cdc42 and signaling. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2003 , 1640, 61-8 | 4.9 | 16 |
| 23 | Accommodation of insertion mutations on the surface and in the interior of staphylococcal nuclease. <i>Protein Science</i> , 1994 , 3, 391-401 | 6.3 | 16 |
| 22 | Potent and Selective Peptide-based Inhibition of the G Protein $G_{\beta\gamma}$. <i>Journal of Biological Chemistry</i> , 2016 , 291, 25608-25616 | 5.4 | 14 |
| 21 | Spatiotemporal dynamics of GEF-H1 activation controlled by microtubule- and Src-mediated pathways. <i>Journal of Cell Biology</i> , 2019 , 218, 3077-3097 | 7.3 | 14 |
| 20 | Calcium-induced structural rearrangements release autoinhibition in the Rap-GEF CalDAG-GEFI. <i>Journal of Biological Chemistry</i> , 2018 , 293, 8521-8529 | 5.4 | 12 |
| 19 | The Salmonella Typhimurium effector SteC inhibits Cdc42-mediated signaling through binding to the exchange factor Cdc24 in <i>Saccharomyces cerevisiae</i> . <i>Molecular Biology of the Cell</i> , 2012 , 23, 4430-43 | 3.5 | 12 |
| 18 | Multiplexed GTPase and GEF biosensor imaging enables network connectivity analysis. <i>Nature Chemical Biology</i> , 2020 , 16, 826-833 | 11.7 | 10 |
| 17 | A membrane-associated, fluorogenic reporter for mammalian phospholipase C isozymes. <i>Journal of Biological Chemistry</i> , 2018 , 293, 1728-1735 | 5.4 | 9 |
| 16 | Fluorescent phosphatidylinositol 4,5-bisphosphate derivatives with modified 6-hydroxy group as novel substrates for phospholipase C. <i>Biochemistry</i> , 2012 , 51, 5300-6 | 3.2 | 8 |
| 15 | A Cdc42 mutant specifically activated by intersectin. <i>Biochemistry</i> , 2005 , 44, 13282-90 | 3.2 | 8 |

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| 14 | A negative-feedback loop regulating ERK1/2 activation and mediated by RasGPR2 phosphorylation. <i>Biochemical and Biophysical Research Communications</i> , 2016 , 474, 193-198 | 3.4 | 7 |
| 13 | High-throughput fluorescence polarization assay for the enzymatic activity of GTPase-activating protein of ADP-ribosylation factor (ARFGAP). <i>Journal of Biomolecular Screening</i> , 2011 , 16, 717-23 | | 7 |
| 12 | Assays of complex formation between RGS protein G gamma subunit-like domains and G beta subunits. <i>Methods in Enzymology</i> , 2002 , 344, 702-23 | 1.7 | 6 |
| 11 | Direct activation of purified phospholipase C epsilon by RhoA studied in reconstituted phospholipid vesicles. <i>Methods in Enzymology</i> , 2006 , 406, 260-71 | 1.7 | 5 |
| 10 | Regulation of PLCbeta isoforms by Rac. <i>Methods in Enzymology</i> , 2006 , 406, 272-80 | 1.7 | 2 |
| 9 | Designer proteins that competitively inhibit G β by targeting its effector site. <i>Journal of Biological Chemistry</i> , 2021 , 297, 101348 | 5.4 | 1 |
| 8 | Lysophosphatidic acid provokes fibroblast chemotaxis through combinatorial regulation of myosin II | | 1 |
| 7 | A High-Throughput Assay to Identify Allosteric Inhibitors of the PLC- β Isozymes Operating at Membranes. <i>Biochemistry</i> , 2020 , 59, 4029-4038 | 3.2 | 0 |
| 6 | Structural Features of RhoGEFs 2003 , 751-755 | | |
| 5 | Molecular cloning and characterization of PLC- β . <i>FASEB Journal</i> , 2006 , 20, A693 | 0.9 | |
| 4 | Activation of Human PLC-eta2 by Gbetagamma. <i>FASEB Journal</i> , 2008 , 22, 728.3 | 0.9 | |
| 3 | Structural studies of RGS9/G β . <i>FASEB Journal</i> , 2008 , 22, 539.2 | 0.9 | |
| 2 | Structural Features of RhoGEFs 2010 , 1843-1847 | | |
| 1 | Fluorogenic XY-69 in Lipid Vesicles for Measuring Activity of Phospholipase C Isozymes. <i>Methods in Molecular Biology</i> , 2021 , 2251, 225-236 | 1.4 | |