Robert Rottapel

List of Publications by Citations

102 papers	6,200 citations	42 h-index	77 g-index
112 ext. papers	7,031 ext. citations	10.7 avg, IF	5.14 L-index

#	Paper	IF	Citations
102	Regulation of NF-kappaB signaling by Pin1-dependent prolyl isomerization and ubiquitin-mediated proteolysis of p65/RelA. *Molecular Cell*, **2003**, 12, 1413-26	17.6	540
101	Binding of phosphatidylinositol-3-OH kinase to CD28 is required for T-cell signalling. *Nature*, **1994**, 369, 327-9	50.4	327
100	The MAGUK family protein CARD11 is essential for lymphocyte activation. *Immunity*, **2003**, 18, 763-75	32.3	284
99	W mutant mice with mild or severe developmental defects contain distinct point mutations in the kinase domain of the c-kit receptor. *Genes and Development*, **1990**, 4, 390-400	12.6	264
98	Essential gene profiles in breast, pancreatic, and ovarian cancer cells. *Cancer Discovery*, **2012**, 2, 172-189	24.4	221
97	Measuring error rates in genomic perturbation screens: gold standards for human functional genomics. *Molecular Systems Biology*, **2014**, 10, 733	12.2	203
96	SHP-1 binds and negatively modulates the c-Kit receptor by interaction with tyrosine 569 in the c-Kit juxtamembrane domain. *Molecular and Cellular Biology*, **1998**, 18, 2089-99	4.8	181
95	A point mutation in CD28 distinguishes proliferative signals from survival signals. *Nature Immunology*, **2001**, 2, 325-32	19.1	177
94	Socs1 binds to multiple signalling proteins and suppresses steel factor-dependent proliferation. *EMBO Journal*, **1999**, 18, 904-15	13	176
93	Structural basis and sequence rules for substrate recognition by Tankyrase explain the basis for cherubism disease. *Cell*, **2011**, 147, 1340-54	56.2	169
92	Loss of Tankyrase-mediated destruction of 3BP2 is the underlying pathogenic mechanism of cherubism. *Cell*, **2011**, 147, 1324-39	56.2	140
91	Suppressor of cytokine signaling-1 inhibits VAV function through protein degradation. *Journal of Biological Chemistry*, **2000**, 275, 14005-8	5.4	139
90	Autoinhibition of the kit receptor tyrosine kinase by the cytosolic juxtamembrane region. *Molecular and Cellular Biology*, **2003**, 23, 3067-78	4.8	133
89	Putting out the fire: coordinated suppression of the innate and adaptive immune systems by SOCS1 and SOCS3 proteins. *Immunological Reviews*, **2008**, 224, 265-83	11.3	132
88	CD28-dependent activation of protein kinase B/Akt blocks Fas-mediated apoptosis by preventing death-inducing signaling complex assembly. *Journal of Experimental Medicine*, **2002**, 196, 335-48	16.6	116
87	CD28 provides T-cell costimulation and enhances PI3K activity at the immune synapse independently of its capacity to interact with the p85/p110 heterodimer. *Blood*, **2008**, 111, 1464-71	2.2	114
86	The tumor suppressor activity of SOCS-1. *Oncogene*, **2002**, 21, 4351-62	9.2	111

85	Survivin loss in thymocytes triggers p53-mediated growth arrest and p53-independent cell death. *Journal of Experimental Medicine*, **2004**, 199, 399-410	16.6	108
84	Regulation of the immune system by SOCS family adaptor proteins. *Seminars in Immunology*, **2004**, 16, 351-65	10.7	102
83	Adaptor function for the Syk kinases-interacting protein 3BP2 in IL-2 gene activation. *Immunity*, **1998**, 9, 595-605	32.3	94
82	Flt3 ligand supports the differentiation of early B cell progenitors in the presence of interleukin-11 and interleukin-7. *European Journal of Immunology*, **1996**, 26, 1504-10	6.1	91
81	Expression and signal transduction of the FLT3 tyrosine kinase receptor. *Acta Haematologica*, **1996**, 95, 218-23	2.7	82
80	The molecular adapter Carma1 controls entry of IkappaB kinase into the central immune synapse. *Journal of Experimental Medicine*, **2004**, 200, 1167-77	16.6	77
79	Alpha4beta1 integrin mediates the recruitment of immature dendritic cells across the blood-brain barrier during experimental autoimmune encephalomyelitis. *Journal of Immunology*, **2010**, 184, 7196-206	5.3	74
78	Lfc and Tctex-1 regulate the genesis of neurons from cortical precursor cells. *Nature Neuroscience*, **2009**, 12, 735-44	25.5	71
77	A negative genetic interaction map in isogenic cancer cell lines reveals cancer cell vulnerabilities. *Molecular Systems Biology*, **2013**, 9, 696	12.2	69
76	The RhoGEF GEF-H1 is required for oncogenic RAS signaling via KSR-1. *Cancer Cell*, **2014**, 25, 181-95	24.3	64
75	Mechanistic insight into the microtubule and actin cytoskeleton coupling through dynein-dependent RhoGEF inhibition. *Molecular Cell*, **2012**, 45, 642-55	17.6	64
74	A novel SHP-1/Grb2-dependent mechanism of negative regulation of cytokine-receptor signaling: contribution of SHP-1 C-terminal tyrosines in cytokine signaling. *Blood*, **2004**, 103, 1398-407	2.2	63
73	Signal transduction by several KIT juxtamembrane domain mutations. *Oncogene*, **2003**, 22, 4710-22	9.2	61
72	Grb2 forms an inducible protein complex with CD28 through a Src homology 3 domain-proline interaction. *Journal of Biological Chemistry*, **1998**, 273, 21194-202	5.4	59
71	3BP2-deficient mice are osteoporotic with impaired osteoblast and osteoclast functions. *Journal of Clinical Investigation*, **2011**, 121, 3244-57	15.9	59
70	Modulation of Rho guanine exchange factor Lfc activity by protein kinase A-mediated phosphorylation. *Molecular and Cellular Biology*, **2009**, 29, 5963-73	4.8	56
69	Cell surface profiling using high-throughput flow cytometry: a platform for biomarker discovery and analysis of cellular heterogeneity. *PLoS ONE*, **2014**, 9, e105602	3.7	54
68	Suppressor of cytokine signaling 1 regulates IL-15 receptor signaling in CD8+CD44high memory T lymphocytes. *Journal of Immunology*, **2003**, 171, 2435-45	5.3	54

67	The c-fms gene complements the mitogenic defect in mast cells derived from mutant W mice but not mi (microphthalmia) mice. *Proceedings of the National Academy of Sciences of the United States of America*, **1991**, 88, 2341-5	11.5	54
66	Regulation of cytokine receptor signaling by SOCS1. *Immunological Reviews*, **2003**, 192, 196-211	11.3	52
65	CD28 regulates the translation of Bcl-xL via the phosphatidylinositol 3-kinase/mammalian target of rapamycin pathway. *Journal of Immunology*, **2005**, 174, 180-94	5.3	52
64	Reciprocal stabilization of ABL and TAZ regulates osteoblastogenesis through transcription factor RUNX2. *Journal of Clinical Investigation*, **2016**, 126, 4482-4496	15.9	49
63	Transcriptional Regulation of miR-31 by Oncogenic KRAS Mediates Metastatic Phenotypes by Repressing RASA1. *Molecular Cancer Research*, **2016**, 14, 267-77	6.6	48
62	SH3BP2 cherubism mutation potentiates TNF-□nduced osteoclastogenesis via NFATc1 and TNF-□mediated inflammatory bone loss. *Journal of Bone and Mineral Research*, **2014**, 29, 2618-35	6.3	45
61	The Rho GTP exchange factor Lfc promotes spindle assembly in early mitosis. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 9529-34	11.5	45
60	Mechanistic insight into GPCR-mediated activation of the microtubule-associated RhoA exchange factor GEF-H1. *Nature Communications*, **2014**, 5, 4857	17.4	42
59	Expression of Flt3 tyrosine kinase receptor gene in mouse hematopoietic and nervous tissues. *Differentiation*, **1995**, 58, 351-9	3.5	40
58	Suppressor of cytokine signaling 1 stringently regulates distinct functions of IL-7 and IL-15 in vivo during T lymphocyte development and homeostasis. *Journal of Immunology*, **2006**, 176, 4029-41	5.3	39
57	Phosphatidylinositol 3-kinase and Ca2+ influx dependence for ligand-stimulated internalization of the c-Kit receptor. *Journal of Biological Chemistry*, **1997**, 272, 30519-25	5.4	38
56	Suppressor of cytokine signaling 1 attenuates IL-15 receptor signaling in CD8+ thymocytes. *Blood*, **2003**, 102, 4115-22	2.2	38
55	The 3BP2 adapter protein is required for optimal B-cell activation and thymus-independent type 2 humoral response. *Molecular and Cellular Biology*, **2007**, 27, 3109-22	4.8	37
54	Suppressor of cytokine signaling 1 interacts with the macrophage colony-stimulating factor receptor and negatively regulates its proliferation signal. *Journal of Biological Chemistry*, **2001**, 276, 22133-9	5.4	37
53	Ckap2 regulates aneuploidy, cell cycling, and cell death in a p53-dependent manner. *Cancer Research*, **2005**, 65, 6685-91	10.1	36
52	Intra-articular fms-like tyrosine kinase 3 ligand expression is a driving force in induction and progression of arthritis. *PLoS ONE*, **2008**, 3, e3633	3.7	35
51	Overexpression of suppressor of cytokine signaling-1 impairs pre-T-cell receptor-induced proliferation but not differentiation of immature thymocytes. *Blood*, **2001**, 97, 2269-77	2.2	35
50	CaPSID: a bioinformatics platform for computational pathogen sequence identification in human genomes and transcriptomes. *BMC Bioinformatics*, **2012**, 13, 206	3.6	34

49	Real-time NMR study of three small GTPases reveals that fluorescent 2$(3$)-O-(N-methylanthraniloyl)-tagged nucleotides alter hydrolysis and exchange kinetics. *Journal of Biological Chemistry*, **2010**, 285, 5132-6	5.4	34
48	Interrogation of Functional Cell-Surface Markers Identifies CD151 Dependency in High-Grade Serous Ovarian Cancer. *Cell Reports*, **2017**, 18, 2343-2358	10.6	33
47	GEF-H1 is necessary for neutrophil shear stress-induced migration during inflammation. *Journal of Cell Biology*, **2016**, 215, 107-119	7.3	32
46	TACC3-TSC2 maintains nuclear envelope structure and controls cell division. *Cell Cycle*, **2010**, 9, 1143-55	4.7	30
45	Phosphatidylinositol-3Skinase is not required for mitogenesis or internalization of the Flt3/Flk2 receptor tyrosine kinase. *Journal of Biological Chemistry*, **1996**, 271, 20075-81	5.4	29
44	MARK3-mediated phosphorylation of ARHGEF2 couples microtubules to the actin cytoskeleton to establish cell polarity. *Science Signaling*, **2017**, 10,	8.8	28
43	Probing the GTPase cycle with real-time NMR: GAP and GEF activities in cell extracts. *Methods*, **2012** , 57, 473-85	4.6	28
42	The mouse W/c-kit locus. A mammalian gene that controls the development of three distinct cell lineages. *Annals of the New York Academy of Sciences*, **1990**, 599, 58-65	6.5	28
41	3BP2 adapter protein is required for receptor activator of NFB ligand (RANKL)-induced osteoclast differentiation of RAW264.7 cells. *Journal of Biological Chemistry*, **2010**, 285, 20952-63	5.4	27
40	shRNA kinome screen identifies TBK1 as a therapeutic target for HER2+ breast cancer. *Cancer Research*, **2014**, 74, 2119-30	10.1	26
39	Loss of SH3 domain-binding protein 2 function suppresses bone destruction in tumor necrosis factor-driven and collagen-induced arthritis in mice. *Arthritis and Rheumatology*, **2015**, 67, 656-67	9.5	23
38	A positive regulatory role for suppressor of cytokine signaling 1 in IFN-gamma-induced MHC class II expression in fibroblasts. *Journal of Immunology*, **2002**, 169, 5010-20	5.3	23
37	The adapter 3BP2: how it plugs into leukocyte signaling. *Advances in Experimental Medicine and Biology*, **2006**, 584, 107-14	3.6	22
36	Immune functions in mice lacking Clnk, an SLP-76-related adaptor expressed in a subset of immune cells. *Molecular and Cellular Biology*, **2004**, 24, 6067-75	4.8	22
35	Interaction with the phosphotyrosine binding domain/phosphotyrosine interacting domain of SHC is required for the transforming activity of the FLT4/VEGFR3 receptor tyrosine kinase. *Journal of Biological Chemistry*, **1996**, 271, 12956-63	5.4	22
34	Impaired V(D)J recombination and increased apoptosis among B cell precursors in the bone marrow of c-Abl-deficient mice. *International Immunology*, **2007**, 19, 267-76	4.9	21
33	RANKL coordinates multiple osteoclastogenic pathways by regulating expression of ubiquitin ligase RNF146. *Journal of Clinical Investigation*, **2017**, 127, 1303-1315	15.9	19
32	Insights into the binding of PARP inhibitors to the catalytic domain of human tankyrase-2. *Acta Crystallographica Section D: Biological Crystallography*, **2014**, 70, 2740-53		18

31	Cherubism allele heterozygosity amplifies microbe-induced inflammatory responses in murine macrophages. *Journal of Clinical Investigation*, **2015**, 125, 1396-400	15.9	18
30	Modulation of IL-7 thresholds by SOCS proteins in developing B lineage cells. *Journal of Immunology*, **2011**, 187, 3499-510	5.3	17
29	Ubiquitin ligase RNF146 coordinates bone dynamics and energy metabolism. *Journal of Clinical Investigation*, **2017**, 127, 2612-2625	15.9	16
28	The 3BP2 adapter protein is required for chemoattractant-mediated neutrophil activation. *Journal of Immunology*, **2012**, 189, 2138-50	5.3	15
27	Flow cytometric analysis of cytokine receptor signal transduction. *Journal of Immunological Methods*, **2003**, 278, 221-34	2.5	15
26	An oncogenic KRAS transcription program activates the RHOGEF ARHGEF2 to mediate transformed phenotypes in pancreatic cancer. *Oncotarget*, **2017**, 8, 4484-4500	3.3	15
25	Anticardiolipin and other antiphospholipid antibodies in critically ill COVID-19 positive and negative patients. *Annals of the Rheumatic Diseases*, **2021**, 80, 1236-1240	2.4	15
24	Spatiotemporal dynamics of GEF-H1 activation controlled by microtubule- and Src-mediated pathways. *Journal of Cell Biology*, **2019**, 218, 3077-3097	7.3	14
23	Gain-of-function variants in SYK cause immune dysregulation and systemic inflammation in humans and mice. *Nature Genetics*, **2021**, 53, 500-510	36.3	11
22	Regulation of cytokine-driven functional differentiation of CD8 T cells by suppressor of cytokine signaling 1 controls autoimmunity and preserves their proliferative capacity toward foreign antigens. *Journal of Immunology*, **2010**, 185, 357-66	5.3	10
21	Putting the brakes on arthritis: can suppressors of cytokine signaling (SOCS) suppress rheumatoid arthritis?. *Journal of Clinical Investigation*, **2001**, 108, 1745-1747	15.9	10
20	Chromosomal Instability and mTORC1 Activation through PTEN Loss Contribute to Proteotoxic Stress in Ovarian Carcinoma. *Cancer Research*, **2019**, 79, 5536-5549	10.1	9
19	Homeodomain-interacting protein kinase (HIPK)-1 is required for splenic B cell homeostasis and optimal T-independent type 2 humoral response. *PLoS ONE*, **2012**, 7, e35533	3.7	9
18	Targeting the centriolar replication factor STIL synergizes with DNA damaging agents for treatment of ovarian cancer. *Oncotarget*, **2017**, 8, 27380-27392	3.3	9
17	Nucleotide Binding, Evolutionary Insights, and Interaction Partners of the Pseudokinase Unc-51-like Kinase 4. *Structure*, **2020**, 28, 1184-1196.e6	5.2	9
16	Suppressor of cytokine signaling 1 regulates an endogenous inhibitor of a mast cell protease. *Journal of Biological Chemistry*, **2003**, 278, 41871-80	5.4	8
15	Haploinsufficiency of RREB1 causes a Noonan-like RASopathy via epigenetic reprogramming of RAS-MAPK pathway genes. *Nature Communications*, **2020**, 11, 4673	17.4	8
14	Preexisting autoimmune disease and immune-related adverse events associated with anti-PD-1 cancer immunotherapy: a national case series from the Canadian Research Group of Rheumatology in Immuno-Oncology. *Cancer Immunology, Immunotherapy*, **2021**, 70, 2197-2207	7.4	7

13	Go with the flow: GEF-H1 mediated shear stress mechanotransduction in neutrophils. *Small GTPases*, **2020**, 11, 23-31	2.7	6
12	Alveolar Bone Protection by Targeting the SH3BP2-SYK Axis in Osteoclasts. *Journal of Bone and Mineral Research*, **2020**, 35, 382-395	6.3	5
11	N6-methyladenosine reader YTHDF1 promotes ARHGEF2 translation and RhoA signaling in colorectal cancer.. *Gastroenterology*, **2021**,	13.3	4
10	The LUBAC participates in lysophosphatidic acid-induced NF-B activation. *Cellular Immunology*, **2020**, 353, 104133	4.4	3
9	Low junctional adhesion molecule-A expression is associated with an epithelial to mesenchymal transition and poorer outcomes in high-grade serous carcinoma of uterine adnexa. *Modern Pathology*, **2020**, 33, 2361-2377	9.8	3
8	Bone dynamics and inflammation: lessons from rare diseases. *Immunological Medicine*, **2020**, 43, 61-64	3.7	3
7	Multiplexed Real-Time NMR GTPase Assay for Simultaneous Monitoring of Multiple Guanine Nucleotide Exchange Factor Activities from Human Cancer Cells and Organoids. *Journal of the American Chemical Society*, **2018**, 140, 4473-4476	16.4	3
6	Co-dependency between KRAS addiction and ARHGEF2 promotes an adaptive escape from MAPK pathway inhibition. *Small GTPases*, **2019**, 10, 441-448	2.7	3
5	Timed Regulation of 3BP2 Induction Is Critical for Sustaining CD8 T Cell Expansion and Differentiation. *Cell Reports*, **2018**, 24, 1123-1135	10.6	2
4	Inhibition of relaxin autocrine signaling confers therapeutic vulnerability in ovarian cancer. *Journal of Clinical Investigation*, **2021**, 131,	15.9	2
3	Endonuclease increases efficiency of osteoblast isolation from murine calvariae. *Scientific Reports*, **2021**, 11, 8502	4.9	1
2	GEF-H1 Is Required for Colchicine Inhibition of Neutrophil Rolling and Recruitment in Mouse Models of Gout. *Journal of Immunology*, **2020**, 205, 3300-3310	5.3	0
1	RUNX2 Phosphorylation by Tyrosine Kinase ABL Promotes Breast Cancer Invasion. *Frontiers in Oncology*, **2021**, 11, 665273	5.3	0