

# Matthew Freeman

## List of Publications by Year in descending order

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65  
papers

6,231  
citations

101543

36  
h-index

118850

62  
g-index

82  
all docs

82  
docs citations

82  
times ranked

4259  
citing authors

#	ARTICLE	IF	CITATIONS
1	Drosophila Rhomboid-1 Defines a Family of Putative Intramembrane Serine Proteases. <i>Cell</i> , 2001, 107, 173-182.	28.9	533
2	Feedback control of intercellular signalling in development. <i>Nature</i> , 2000, 408, 313-319.	27.8	511
3	Mitochondrial membrane remodelling regulated by a conserved rhomboid protease. <i>Nature</i> , 2003, 423, 537-541.	27.8	367
4	Tumor Necrosis Factor Signaling Requires iRhom2 to Promote Trafficking and Activation of TACE. <i>Science</i> , 2012, 335, 225-228.	12.6	344
5	Regulated Intracellular Ligand Transport and Proteolysis Control EGF Signal Activation in <i>Drosophila</i> . <i>Cell</i> , 2001, 107, 161-171.	28.9	342
6	Inhibition of <i>Drosophila</i> EGF receptor activation by the secreted protein Argos. <i>Nature</i> , 1995, 376, 699-702.	27.8	250
7	A family of Rhomboid intramembrane proteases activates all <i>Drosophila</i> membrane-tethered EGF ligands. <i>EMBO Journal</i> , 2002, 21, 4277-4286.	7.8	226
8	Substrate Specificity of Rhomboid Intramembrane Proteases Is Governed by Helix-Breaking Residues in the Substrate Transmembrane Domain. <i>Molecular Cell</i> , 2003, 11, 1425-1434.	9.7	221
9	Functional and evolutionary implications of enhanced genomic analysis of rhomboid intramembrane proteases. <i>Genome Research</i> , 2007, 17, 1634-1646.	5.5	207
10	A family of <i>rhomboid</i> -like genes: <i>Drosophila rhomboid-1</i> and <i>roughoid/rhomboid-3</i> cooperate to activate EGF receptor signaling. <i>Genes and Development</i> , 2000, 14, 1651-1663.	5.9	172
11	Sequence-Specific Intramembrane Proteolysis: Identification of a Recognition Motif in Rhomboid Substrates. <i>Molecular Cell</i> , 2009, 36, 1048-1059.	9.7	167
12	Mechanism of intramembrane proteolysis investigated with purified rhomboid proteases. <i>EMBO Journal</i> , 2005, 24, 464-472.	7.8	157
13	Rhomboid protease AarA mediates quorum-sensing in <i>Providencia stuartii</i> by activating TatA of the twin-arginine translocase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 1003-1008.	7.1	144
14	Rhomboid Family Pseudoproteases Use the ER Quality Control Machinery to Regulate Intercellular Signaling. <i>Cell</i> , 2011, 145, 79-91.	28.9	143
15	New lives for old: evolution of pseudoenzyme function illustrated by iRhoms. <i>Nature Reviews Molecular Cell Biology</i> , 2012, 13, 489-498.	37.0	137
16	Conservation of Intramembrane Proteolytic Activity and Substrate Specificity in Prokaryotic and Eukaryotic Rhomboids. <i>Current Biology</i> , 2002, 12, 1507-1512.	3.9	126
17	Rhomboid Proteases and their Biological Functions. <i>Annual Review of Genetics</i> , 2008, 42, 191-210.	7.6	123
18	Mammalian iRhoms have distinct physiological functions including an essential role in TACE regulation. <i>EMBO Reports</i> , 2013, 14, 884-890.	4.5	120

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19	Notch signalling and the initiation of neural development in the <i>Drosophila</i> eye. <i>Development</i> (Cambridge), 2001, 128, 3889-3898.	2.5	120
20	Normal Mitochondrial Dynamics Requires Rhomboid-7 and Affects <i>Drosophila</i> Lifespan and Neuronal Function. <i>Current Biology</i> , 2006, 16, 982-989.	3.9	119
21	The Rhomboid-Like Superfamily: Molecular Mechanisms and Biological Roles. <i>Annual Review of Cell and Developmental Biology</i> , 2014, 30, 235-254.	9.4	115
22	Myosin II Regulates Complex Cellular Arrangement and Epithelial Architecture in <i>Drosophila</i> . <i>Developmental Cell</i> , 2007, 13, 717-729.	7.0	103
23	Mammalian EGF receptor activation by the rhomboid protease RHBDL2. <i>EMBO Reports</i> , 2011, 12, 421-427.	4.5	103
24	The structural basis for catalysis and substrate specificity of a rhomboid protease. <i>EMBO Journal</i> , 2010, 29, 3797-3809.	7.8	97
25	Phosphorylation of iRhom2 at the plasma membrane controls mammalian TACE-dependent inflammatory and growth factor signalling. <i>ELife</i> , 2017, 6, .	6.0	90
26	The role of protease activity in ErbB biology. <i>Experimental Cell Research</i> , 2009, 315, 671-682.	2.6	75
27	Control of ADAM17 activity by regulation of its cellular localisation. <i>Scientific Reports</i> , 2016, 6, 35067.	3.3	75
28	Diverse Substrate Recognition Mechanisms for Rhomboids: Thrombomodulin Is Cleaved by Mammalian Rhomboids. <i>Current Biology</i> , 2004, 14, 236-241.	3.9	67
29	Proteolysis within the membrane: rhomboids revealed. <i>Nature Reviews Molecular Cell Biology</i> , 2004, 5, 188-197.	37.0	62
30	Rhomboid proteases in human disease: Mechanisms and future prospects. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2017, 1864, 2200-2209.	4.1	56
31	Control of EGF receptor signalling: lessons from fruitflies. , 1999, 18, 181-201.		55
32	Monocyclic $\beta$ -Lactams Are Selective, Mechanism-Based Inhibitors of Rhomboid Intramembrane Proteases. <i>ACS Chemical Biology</i> , 2011, 6, 325-335.	3.4	55
33	An <i>Arabidopsis</i> Rhomboid homolog is an intramembrane protease in plants. <i>FEBS Letters</i> , 2005, 579, 5723-5728.	2.8	54
34	FRMD8 promotes inflammatory and growth factor signalling by stabilising the iRhom/ADAM17 sheddase complex. <i>ELife</i> , 2018, 7, .	6.0	53
35	Cutting Proteins within Lipid Bilayers: Rhomboid Structure and Mechanism. <i>Molecular Cell</i> , 2007, 28, 930-940.	9.7	51
36	The molecular, cellular and pathophysiological roles of iRhom pseudoproteases. <i>Open Biology</i> , 2019, 9, 190003.	3.6	47

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37	Rhomoid intramembrane protease RHBDL4 triggers ER-export and non-canonical secretion of membrane-anchored TGF $\beta$ . <i>Scientific Reports</i> , 2016, 6, 27342.	3.3	39
38	Quantitative proteomics screen identifies a substrate repertoire of rhomboid protease RHBDL2 in human cells and implicates it in epithelial homeostasis. <i>Scientific Reports</i> , 2017, 7, 7283.	3.3	39
39	Rhomoids: 7 years of a new protease family. <i>Seminars in Cell and Developmental Biology</i> , 2009, 20, 231-239.	5.0	36
40	Rhomoid family member 2 regulates cytoskeletal stress-associated Keratin 16. <i>Nature Communications</i> , 2017, 8, 14174.	12.8	36
41	Genetic interaction implicates iRhom2 in the regulation of EGF receptor signalling in mice. <i>Biology Open</i> , 2014, 3, 1151-1157.	1.2	32
42	Substrates and physiological functions of secretase rhomboid proteases. <i>Seminars in Cell and Developmental Biology</i> , 2016, 60, 10-18.	5.0	31
43	Evidence that Argos is an antagonistic ligand of the EGF receptor. <i>Oncogene</i> , 2000, 19, 3560-3562.	5.9	30
44	Structure of Rhomboid Protease in Complex with $\beta$ -Lactam Inhibitors Defines the S2 $\beta$ Cavity. <i>Structure</i> , 2013, 21, 1051-1058.	3.3	29
45	The EGFR ligands Spitz and Keren act cooperatively in the <i>Drosophila</i> eye. <i>Developmental Biology</i> , 2007, 307, 105-113.	2.0	28
46	ADAM17-triggered TNF signalling protects the ageing <i>Drosophila</i> retina from lipid droplet-mediated degeneration. <i>EMBO Journal</i> , 2020, 39, e104415.	7.8	25
47	Mechanism-based traps enable protease and hydrolase substrate discovery. <i>Nature</i> , 2022, 602, 701-707.	27.8	25
48	Neutrophil and Macrophage Cell Surface Colony-Stimulating Factor 1 Shed by ADAM17 Drives Mouse Macrophage Proliferation in Acute and Chronic Inflammation. <i>Molecular and Cellular Biology</i> , 2018, 38, .	2.3	24
49	Bacterial rhomboid proteases mediate quality control of orphan membrane proteins. <i>EMBO Journal</i> , 2020, 39, e102922.	7.8	21
50	Morphogen Gradients, in Theory. <i>Developmental Cell</i> , 2002, 2, 689-690.	7.0	18
51	MEDAL REVIEW: A fly's eye view of EGF receptor signalling. <i>EMBO Journal</i> , 2002, 21, 6635-6642.	7.8	16
52	Rhomoids, signalling and cell biology. <i>Biochemical Society Transactions</i> , 2016, 44, 945-950.	3.4	15
53	iRhom2-mediated proinflammatory signalling regulates heart repair following myocardial infarction. <i>JCI Insight</i> , 2018, 3, .	5.0	13
54	Spatial proteomics reveal that the protein phosphatase PTP1B interacts with and may modify tyrosine phosphorylation of the rhomboid protease RHBDL4. <i>Journal of Biological Chemistry</i> , 2019, 294, 11486-11497.	3.4	12

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55	iRhom pseudoproteases regulate ER stress-induced cell death through IP3 receptors and BCL-2. <i>Nature Communications</i> , 2022, 13, 1257.	12.8	12
56	Intramembrane proteolysis by rhomboids: catalytic mechanisms and regulatory principles. <i>Current Opinion in Structural Biology</i> , 2013, 23, 851-858.	5.7	10
57	A genome-wide association study in mice reveals a role for Rhbdf2 in skeletal homeostasis. <i>Scientific Reports</i> , 2020, 10, 3286.	3.3	10
58	The iRhom homology domain is indispensable for ADAM17-mediated TNF $\alpha$ and EGF receptor ligand release. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 5015-5040.	5.4	8
59	Know Thyself: Stable Cell Fate Decisions in Insect Colour Vision. <i>Current Biology</i> , 2005, 15, R924-R926.	3.9	5
60	Conformational surveillance of Orai1 by a rhomboid intramembrane protease prevents inappropriate CRAC channel activation. <i>Molecular Cell</i> , 2021, 81, 4784-4798.e7.	9.7	5
61	The mammalian rhomboid protein RHBDL4 protects against endoplasmic reticulum stress by regulating the morphology and distribution of ER sheets. <i>Journal of Biological Chemistry</i> , 2022, 298, 101935.	3.4	5
62	Rhomboids. <i>Current Biology</i> , 2003, 13, R586.	3.9	4
63	KOMPEITO, an Atypical Arabidopsis Rhomboid-Related Gene, Is Required for Callose Accumulation and Pollen Wall Development. <i>International Journal of Molecular Sciences</i> , 2022, 23, 5959.	4.1	4
64	Rhomboid Proteins in Cell Signaling. <i>FASEB Journal</i> , 2021, 35, .	0.5	0
65	Intercellular Signaling by Rhomboids in Eukaryotes and Prokaryotes. , 0, , 431-442.		0