Matthew Freeman

List of Publications by Citations

67 papers	5,379 citations	35 h-index	73 g-index
82 ext. papers	5,870 ext. citations	14.7 avg, IF	5.97 L-index

#	Paper	IF	Citations
67	Drosophila rhomboid-1 defines a family of putative intramembrane serine proteases. *Cell*, **2001**, 107, 173-82	56.2	496
66	Feedback control of intercellular signalling in development. *Nature*, **2000**, 408, 313-9	50.4	431
65	Mitochondrial membrane remodelling regulated by a conserved rhomboid protease. *Nature*, **2003**, 423, 537-41	50.4	350
64	Regulated intracellular ligand transport and proteolysis control EGF signal activation in Drosophila. *Cell*, **2001**, 107, 161-71	56.2	322
63	Tumor necrosis factor signaling requires iRhom2 to promote trafficking and activation of TACE. *Science*, **2012**, 335, 225-8	33.3	286
62	Inhibition of Drosophila EGF receptor activation by the secreted protein Argos. *Nature*, **1995**, 376, 699-702	50.4	235
61	Substrate specificity of rhomboid intramembrane proteases is governed by helix-breaking residues in the substrate transmembrane domain. *Molecular Cell*, **2003**, 11, 1425-34	17.6	213
60	A family of Rhomboid intramembrane proteases activates all Drosophila membrane-tethered EGF ligands. *EMBO Journal*, **2002**, 21, 4277-86	13	197
59	Functional and evolutionary implications of enhanced genomic analysis of rhomboid intramembrane proteases. *Genome Research*, **2007**, 17, 1634-46	9.7	179
58	Sequence-specific intramembrane proteolysis: identification of a recognition motif in rhomboid substrates. *Molecular Cell*, **2009**, 36, 1048-59	17.6	149
57	Mechanism of intramembrane proteolysis investigated with purified rhomboid proteases. *EMBO Journal*, **2005**, 24, 464-72	13	143
56	A family of rhomboid-like genes: Drosophila rhomboid-1 and roughoid/rhomboid-3 cooperate to activate EGF receptor signaling. *Genes and Development*, **2000**, 14, 1651-1663	12.6	137
55	Rhomboid protease AarA mediates quorum-sensing in Providencia stuartii by activating TatA of the twin-arginine translocase. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 1003-8	11.5	131
54	Rhomboid family pseudoproteases use the ER quality control machinery to regulate intercellular signaling. *Cell*, **2011**, 145, 79-91	56.2	126
53	Conservation of intramembrane proteolytic activity and substrate specificity in prokaryotic and eukaryotic rhomboids. *Current Biology*, **2002**, 12, 1507-12	6.3	119
52	New lives for old: evolution of pseudoenzyme function illustrated by iRhoms. *Nature Reviews Molecular Cell Biology*, **2012**, 13, 489-98	48.7	117
51	Rhomboid proteases and their biological functions. *Annual Review of Genetics*, **2008**, 42, 191-210	14.5	115

50	Normal mitochondrial dynamics requires rhomboid-7 and affects Drosophila lifespan and neuronal function. *Current Biology*, **2006**, 16, 982-9	6.3	106
49	Notch signalling and the initiation of neural development in the Drosophila eye. *Development (Cambridge)*, **2001**, 128, 3889-3898	6.6	100
48	Mammalian iRhoms have distinct physiological functions including an essential role in TACE regulation. *EMBO Reports*, **2013**, 14, 884-90	6.5	96
47	Myosin II regulates complex cellular arrangement and epithelial architecture in Drosophila. *Developmental Cell*, **2007**, 13, 717-729	10.2	95
46	The rhomboid-like superfamily: molecular mechanisms and biological roles. *Annual Review of Cell and Developmental Biology*, **2014**, 30, 235-54	12.6	91
45	Mammalian EGF receptor activation by the rhomboid protease RHBDL2. *EMBO Reports*, **2011**, 12, 421-7	6.5	89
44	The structural basis for catalysis and substrate specificity of a rhomboid protease. *EMBO Journal*, **2010**, 29, 3797-809	13	89
43	The role of protease activity in ErbB biology. *Experimental Cell Research*, **2009**, 315, 671-82	4.2	72
42	Phosphorylation of iRhom2 at the plasma membrane controls mammalian TACE-dependent inflammatory and growth factor signalling. *ELife*, **2017**, 6,	8.9	66
41	Proteolysis within the membrane: rhomboids revealed. *Nature Reviews Molecular Cell Biology*, **2004**, 5, 188-97	48.7	58
40	Diverse substrate recognition mechanisms for rhomboids; thrombomodulin is cleaved by Mammalian rhomboids. *Current Biology*, **2004**, 14, 236-41	6.3	54
39	Monocyclic β-lactams are selective, mechanism-based inhibitors of rhomboid intramembrane proteases. *ACS Chemical Biology*, **2011**, 6, 325-35	4.9	51
38	Control of EGF receptor signalling: lessons from fruitflies. *Cancer and Metastasis Reviews*, **1999**, 18, 181-201	5.1	50
37	Cutting proteins within lipid bilayers: rhomboid structure and mechanism. *Molecular Cell*, **2007**, 28, 930-40	17.6	49
36	An Arabidopsis Rhomboid homolog is an intramembrane protease in plants. *FEBS Letters*, **2005**, 579, 5723-8	3.8	49
35	Control of ADAM17 activity by regulation of its cellular localisation. *Scientific Reports*, **2016**, 6, 35067	4.9	46
34	Rhomboid proteases in human disease: Mechanisms and future prospects. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2017**, 1864, 2200-2209	4.9	41
33	Rhomboids: 7 years of a new protease family. *Seminars in Cell and Developmental Biology*, **2009**, 20, 231-9	7.5	35

32	Quantitative proteomics screen identifies a substrate repertoire of rhomboid protease RHBDL2 in human cells and implicates it in epithelial homeostasis. *Scientific Reports*, **2017**, 7, 7283	4.9	31
31	FRMD8 promotes inflammatory and growth factor signalling by stabilising the iRhom/ADAM17 sheddase complex. *ELife*, **2018**, 7,	8.9	31
30	Rhomboid intramembrane protease RHBDL4 triggers ER-export and non-canonical secretion of membrane-anchored TGF *Scientific Reports*, **2016**, 6, 27342	4.9	29
29	Evidence that Argos is an antagonistic ligand of the EGF receptor. *Oncogene*, **2000**, 19, 3560-2	9.2	28
28	The molecular, cellular and pathophysiological roles of iRhom pseudoproteases. *Open Biology*, **2019**, 9, 190003	7	27
27	Structure of rhomboid protease in complex with lactam inhibitors defines the S2acavity. *Structure*, **2013**, 21, 1051-8	5.2	26
26	Rhomboid family member 2 regulates cytoskeletal stress-associated Keratin 16. *Nature Communications*, **2017**, 8, 14174	17.4	25
25	Genetic interaction implicates iRhom2 in the regulation of EGF receptor signalling in mice. *Biology Open*, **2014**, 3, 1151-7	2.2	25
24	Substrates and physiological functions of secretase rhomboid proteases. *Seminars in Cell and Developmental Biology*, **2016**, 60, 10-18	7.5	24
23	The EGFR ligands Spitz and Keren act cooperatively in the Drosophila eye. *Developmental Biology*, **2007**, 307, 105-13	3.1	23
22	Neutrophil and Macrophage Cell Surface Colony-Stimulating Factor 1 Shed by ADAM17 Drives Mouse Macrophage Proliferation in Acute and Chronic Inflammation. *Molecular and Cellular Biology*, **2018**, 38,	4.8	16
21	Morphogen gradients, in theory. *Developmental Cell*, **2002**, 2, 689-90	10.2	16
20	A flya eye view of EGF receptor signalling. *EMBO Journal*, **2002**, 21, 6635-42	13	15
19	Rhomboids, signalling and cell biology. *Biochemical Society Transactions*, **2016**, 44, 945-50	5.1	14
18	iRhom2-mediated proinflammatory signalling regulates heart repair following myocardial infarction. *JCI Insight*, **2018**, 3,	9.9	10
17	Intramembrane proteolysis by rhomboids: catalytic mechanisms and regulatory principles. *Current Opinion in Structural Biology*, **2013**, 23, 851-8	8.1	9
16	ADAM17-triggered TNF signalling protects the ageing Drosophila retina from lipid droplet-mediated degeneration. *EMBO Journal*, **2020**, 39, e104415	13	8
15	Bacterial rhomboid proteases mediate quality control of orphan membrane proteins. *EMBO Journal*, **2020**, 39, e102922	13	7

List of Publications

14	Spatial proteomics reveal that the protein phosphatase PTP1B interacts with and may modify tyrosine phosphorylation of the rhomboid protease RHBDL4. *Journal of Biological Chemistry*, **2019**, 294, 11486-11497	5.4	5
13	A genome-wide association study in mice reveals a role for Rhbdf2 in skeletal homeostasis. *Scientific Reports*, **2020**, 10, 3286	4.9	5
12	Eye development: stable cell fate decisions in insect colour vision. *Current Biology*, **2005**, 15, R924-6	6.3	5
11	Rhomboids. *Current Biology*, **2003**, 13, R586	6.3	4
10	Conformational surveillance of Orai1 by a rhomboid intramembrane protease prevents inappropriate CRAC channel activation. *Molecular Cell*, **2021**, 81, 4784-4798.e7	17.6	2
9	Author response: Phosphorylation of iRhom2 at the plasma membrane controls mammalian TACE-dependent inflammatory and growth factor signalling **2017**,		2
8	Author response: FRMD8 promotes inflammatory and growth factor signalling by stabilising the iRhom/ADAM17 sheddase complex **2018**,		2
7	The iRhom homology domain is indispensable for ADAM17-mediated TNF and EGF receptor ligand release. *Cellular and Molecular Life Sciences*, **2021**, 78, 5015-5040	10.3	2
6	ADAM17-triggered TNF signalling protects the ageing Drosophila retina from lipid droplet mediated degeneration		1
5	Conformational surveillance of Orai1 by a rhomboid intramembrane protease prevents inappropriate CRAC channel activation		1
4	iRhom pseudoproteases regulate ER stress-induced cell death through IP receptors and BCL-2.. *Nature Communications*, **2022**, 13, 1257	17.4	1
3	The mammalian rhomboid protein RHBDL4 protects against endoplasmic reticulum stress by regulating the morphology and distribution of ER sheets.. *Journal of Biological Chemistry*, **2022**, 101935	5.4	0
2	Intercellular Signaling by Rhomboids in Eukaryotes431-442		
1	KOMPEITO, an Atypical Arabidopsis Rhomboid-Related Gene, Is Required for Callose Accumulation and Pollen Wall Development. *International Journal of Molecular Sciences*, **2022**, 23, 5959	6.3	