

Conservation of the regulated structure of folded myosin  
600 million years of independent evolution

Proceedings of the National Academy of Sciences of the United States of America  
105, 6022-6026

DOI: [10.1073/pnas.0707846105](https://doi.org/10.1073/pnas.0707846105)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Folding and regulation in myosins II and V. <i>Journal of Muscle Research and Cell Motility</i> , 2007, 28, 363-370.	0.9	37
2	Blebbistatin Stabilizes the Helical Order of Myosin Filaments by Promoting the Switch 2 Closed State. <i>Biophysical Journal</i> , 2008, 95, 3322-3329.	0.2	47
3	Millisecond Time-Resolved Changes Occurring in Ca <sup>2+</sup> -Regulated Myosin Filaments upon Relaxation. <i>Journal of Molecular Biology</i> , 2008, 381, 256-260.	2.0	9
4	Three-Dimensional Reconstruction of Tarantula Myosin Filaments Suggests How Phosphorylation May Regulate Myosin Activity. <i>Journal of Molecular Biology</i> , 2008, 384, 780-797.	2.0	132
5	Head-Head and Head-Tail Interaction: A General Mechanism for Switching Off Myosin II Activity in Cells. <i>Molecular Biology of the Cell</i> , 2008, 19, 3234-3242.	0.9	168
6	A FERM domain autoregulates <i>Drosophila</i> myosin 7a activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 4189-4194.	3.3	92
7	Muscle myosin filaments: cores, crowns and couplings. <i>Biophysical Reviews</i> , 2009, 1, 149-160.	1.5	26
8	Head-Head Interaction Characterizes the Relaxed State of Limulus Muscle Myosin Filaments. <i>Journal of Molecular Biology</i> , 2009, 385, 423-431.	2.0	68
9	The On-Off Switch in Regulated Myosins: Different Triggers but Related Mechanisms. <i>Journal of Molecular Biology</i> , 2009, 394, 496-505.	2.0	33
10	Conventional myosins - unconventional functions. <i>Biophysical Reviews</i> , 2010, 2, 67-82.	1.5	12
11	Nonmuscle myosin IIA with a GFP fused to the N-terminus of the regulatory light chain is regulated normally. <i>Journal of Muscle Research and Cell Motility</i> , 2010, 31, 163-170.	0.9	24
12	Common Structural Motifs for the Regulation of Divergent Class II Myosins. <i>Journal of Biological Chemistry</i> , 2010, 285, 16403-16407.	1.6	57
13	Role of the Tail in the Regulated State of Myosin 2. <i>Journal of Molecular Biology</i> , 2011, 408, 863-878.	2.0	35
14	Essential "ankle" in the myosin lever arm: Fig. 1.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 5-6.	3.3	29
15	Visualizing key hinges and a potential major source of compliance in the lever arm of myosin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 114-119.	3.3	26
16	Cytoskeleton and Cell Motility. , 2011, , 191-204.		3
17	The myosin interacting-heads motif is present in the relaxed thick filament of the striated muscle of scorpion. <i>Journal of Structural Biology</i> , 2012, 180, 469-478.	1.3	34
18	Isolation, electron microscopy and 3D reconstruction of invertebrate muscle myofilaments. <i>Methods</i> , 2012, 56, 33-43.	1.9	9

#	ARTICLE	IF	CITATIONS
19	Phosphorylated Smooth Muscle Heavy Meromyosin Shows an Open Conformation Linked to Activation. <i>Journal of Molecular Biology</i> , 2012, 415, 274-287.	2.0	25
20	4.14 Smooth Muscle and Myosin Regulation. , 2012, , 268-286.		1
21	Gene duplication and conversion events shaped three homologous, differentially expressed myosin regulatory light chain (MLC2) genes. <i>European Journal of Cell Biology</i> , 2012, 91, 629-639.	1.6	10
22	Avian Synaptopodin 2 (Fesselin) Stabilizes Myosin Filaments and Actomyosin in the Presence of ATP. <i>Biochemistry</i> , 2013, 52, 7641-7647.	1.2	2
23	Characterization of Three Full-length Human Nonmuscle Myosin II Paralogs. <i>Journal of Biological Chemistry</i> , 2013, 288, 33398-33410.	1.6	167
24	Different Head Environments in Tarantula Thick Filaments Support a Cooperative Activation Process. <i>Biophysical Journal</i> , 2013, 105, 2114-2122.	0.2	22
25	Genetic/transgenic conditional expression of full-length and headless nonmuscle myosin-II molecules: Head domain regulates localization in auditory neurons. <i>International Journal of Pediatric Otorhinolaryngology</i> , 2013, 77, 785-791.	0.4	0
26	The heavy chain has its day. <i>Bioarchitecture</i> , 2013, 3, 77-85.	1.5	77
27	Structural basis of the relaxed state of a Ca <sup>2+</sup> -regulated myosin filament and its evolutionary implications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8561-8566.	3.3	48
28	Purification, crystallization and preliminary X-ray crystallographic analysis of squid heavy meromyosin. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2013, 69, 248-252.	0.7	6
29	Structural insights into the regulation of sialic acid catabolism by the <i>Vibrio vulnificus</i> transcriptional repressor NanR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E2829-37.	3.3	22
30	Life without double-headed non-muscle myosin II motor proteins. <i>Frontiers in Chemistry</i> , 2014, 2, 45.	1.8	37
31	Myosin light chains: Teaching old dogs new tricks. <i>Bioarchitecture</i> , 2014, 4, 169-188.	1.5	113
32	Role of the essential light chain in the activation of smooth muscle myosin by regulatory light chain phosphorylation. <i>Journal of Structural Biology</i> , 2014, 185, 375-382.	1.3	27
33	Flexibility within the Heads of Muscle Myosin-2 Molecules. <i>Journal of Molecular Biology</i> , 2014, 426, 894-907.	2.0	24
34	Role of the Essential Light Chain in the Activation of Smooth Muscle Myosin by Regulatory Light Chain Phosphorylation. <i>Biophysical Journal</i> , 2014, 106, 726a.	0.2	0
35	Sequential myosin phosphorylation activates tarantula thick filament via a disorder-to-order transition. <i>Molecular BioSystems</i> , 2015, 11, 2167-2179.	2.9	15
36	Scallop Adductor Muscles. <i>Developments in Aquaculture and Fisheries Science</i> , 2016, , 161-218.	1.3	10

#	ARTICLE	IF	CITATIONS
37	Structure of myosin filaments from relaxed <i>Lethocerus</i> flight muscle by cryo-EM at 6 Å resolution. <i>Science Advances</i> , 2016, 2, e1600058.	4.7	79
38	Myosin light chain phosphorylation enhances contraction of heart muscle via structural changes in both thick and thin filaments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E3039-47.	3.3	105
39	Conserved Intramolecular Interactions Maintain Myosin Interacting-Heads Motifs Explaining Tarantula Muscle Super-Relaxed State Structural Basis. <i>Journal of Molecular Biology</i> , 2016, 428, 1142-1164.	2.0	82
40	Fibrous Proteins: Structures and Mechanisms. <i>Sub-Cellular Biochemistry</i> , 2017, , .	1.0	13
41	Myosin and Actin Filaments in Muscle: Structures and Interactions. <i>Sub-Cellular Biochemistry</i> , 2017, 82, 319-371.	1.0	28
42	The myosin mesa and the basis of hypercontractility caused by hypertrophic cardiomyopathy mutations. <i>Nature Structural and Molecular Biology</i> , 2017, 24, 525-533.	3.6	164
44	Activated full-length myosin-X moves processively on filopodia with large steps toward diverse two-dimensional directions. <i>Scientific Reports</i> , 2017, 7, 44237.	1.6	12
45	Coupling between myosin head conformation and the thick filament backbone structure. <i>Journal of Structural Biology</i> , 2017, 200, 334-342.	1.3	12
46	Regulation of Contraction by the Thick Filaments in Skeletal Muscle. <i>Biophysical Journal</i> , 2017, 113, 2579-2594.	0.2	129
47	Cytoskeleton and Cell Motility. , 2017, , 166-180.		0
48	Interacting-heads motif has been conserved as a mechanism of myosin II inhibition since before the origin of animals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E1991-E2000.	3.3	70
49	Lessons from a tarantula: new insights into myosin interacting-heads motif evolution and its implications on disease. <i>Biophysical Reviews</i> , 2018, 10, 1465-1477.	1.5	39
50	Hypertrophic cardiomyopathy and the myosin mesa: viewing an old disease in a new light. <i>Biophysical Reviews</i> , 2018, 10, 27-48.	1.5	115
51	Bipolar filaments of human nonmuscle myosin 2-A and 2-B have distinct motile and mechanical properties. <i>ELife</i> , 2018, 7, .	2.8	54
52	The central role of the tail in switching off 10S myosin II activity. <i>Journal of General Physiology</i> , 2019, 151, 1081-1093.	0.9	15
53	The mesa trail and the interacting heads motif of myosin II. <i>Archives of Biochemistry and Biophysics</i> , 2020, 680, 108228.	1.4	16
54	The Myosin Family of Mechanoenzymes: From Mechanisms to Therapeutic Approaches. <i>Annual Review of Biochemistry</i> , 2020, 89, 667-693.	5.0	45
55	Muscle myosins form folded monomers, dimers, and tetramers during filament polymerization in vitro. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 15666-15672.	3.3	8

#	ARTICLE	IF	CITATIONS
56	To lie or not to lie: Super-relaxing with myosins. <i>ELife</i> , 2021, 10, .	2.8	62
58	X-Ray Solution Scattering of Squid Heavy Meromyosin: Strengthening the Evidence for an Ancient Compact off State. <i>PLoS ONE</i> , 2013, 8, e81994.	1.1	8
59	CryoEM structure of <i>Drosophila</i> flight muscle thick filaments at 7 Å... resolution. <i>Life Science Alliance</i> , 2020, 3, e202000823.	1.3	22
61	Two Classes of Myosin Inhibitors, Para-nitroblebbistatin and Mavacamten, Stabilize $\hat{I}^2$ -Cardiac Myosin in Different Structural and Functional States. <i>Journal of Molecular Biology</i> , 2021, 433, 167295.	2.0	19
62	Technical approaches of single particle analysis following electron microscopy to pre-screening biological candidates targeted on high resolution studies. <i>Journal of Analytical Science and Technology</i> , 2010, 1, 66-70.	1.0	0
63	Non-muscle Myosin II Motor Proteins in Human Health and Diseases. , 2017, , 79-107.		0
66	Microscopic studies on severing properties of actin-binding protein: its potential use in therapeutic treatment of actin-rich inclusions. <i>Journal of Analytical Science and Technology</i> , 2021, 12, .	1.0	3
67	Interacting-heads motif explains the X-ray diffraction pattern of relaxed vertebrate skeletal muscle. <i>Biophysical Journal</i> , 2022, 121, 1354-1366.	0.2	9
68	Cryo-EM structure of the autoinhibited state of myosin-2. <i>Science Advances</i> , 2021, 7, eabk3273.	4.7	24
69	Structural Analysis of Human Fascin-1: Essential Protein for Actin Filaments Bundling. <i>Life</i> , 2022, 12, 843.	1.1	1
70	Hypertrophic cardiomyopathy mutations in the pliant and light chain-binding regions of the lever arm of human $\hat{I}^2$ -cardiac myosin have divergent effects on myosin function. <i>ELife</i> , 0, 11, .	2.8	9
71	Review on the structural understanding of the 10S myosin II in the era of Cryo-electron microscopy. <i>Applied Microscopy</i> , 2022, 52, .	0.8	0
72	Studies of functional properties of espin 1: Its interaction to actin filaments. <i>Frontiers in Cell and Developmental Biology</i> , 0, 10, .	1.8	1
73	Non-muscle myosin 2 at a glance. <i>Journal of Cell Science</i> , 2023, 136, .	1.2	12
74	Muscle Mechanics and Thick Filament Activation: An Emerging Two-Way Interaction for the Vertebrate Striated Muscle Fine Regulation. <i>International Journal of Molecular Sciences</i> , 2023, 24, 6265.	1.8	2