Supplementary Table S1. List of studies employing SMIFH2 with assigned DOI.

Year	Study	DOI	Title
2022	Petri et al, 2022	10.1371/journal.pone.0275164	Abnormal left-right organizer and laterality defects in Xenopus embryos after formin inhibitor SMIFH2 treatment
2022	Orman et al, 2022	10.1038/s41598-022-17685-z	Alterations to the broad-spectrum formin inhibitor SMIFH2 modulate potency but not specificity
2022	Thoidingjam et al, 2022	10.1002/anie.202205231	Small Molecule Inhibitors of Interferon-Induced JAK-STAT Signalling
2022	Becker et al, 2022	0.3390/cells11091559	The Cytoskeleton Effectors Rho-Kinase (ROCK) and Mammalian Diaphanous-Related (mDia) Formin Have Dynamic Roles in Tumor Microtube Formation in Invasive Glioblastoma Cells
2022	Aloisio et al, 2022	10.1016/j.stemcr.2022.05.002	Arp2/3 complex activity is necessary for mouse ESC differentiation, times formative pluripotency, and enables lineage specification
2022	Akwii et al, 2022	10.1007/s10456-022-09831-y	Angiopoietin-2-induced lymphatic endothelial cell migration drives lymphangiogenesis via the β1 integrin-RhoA-formin axis
2022	Cangkrama et al, 2022	10.1158/0008-5472.CAN-22-0162	A pro-tumorigenic mDia2-MIRO1 axis controls mitochondrial positioning and function in cancer-associated fibroblasts
2022	Chang et al, 2022	10.1016/j.celrep.2022.110390	Substrate rigidity dictates colorectal tumorigenic cell stemness and metastasis via CRAD-dependent mechanotransduction
2022	de Poret et al., 2022	10.1111/boc.202100095	Extracellular vesicles containing the I-BAR protein IRSp53 are released from the cell plasma membrane in an Arp2/3 dependent manner
2022	Eftekharjoo et al, 2022	10.1021/acsbiomaterials.2c00253	Epithelial Cell-Like Elasticity Modulates Actin-Dependent E-Cadherin Adhesion Organization
2022	Fu et al, 2022	10.1242/jcs.258929	Cooperative regulation of adherens junction expansion through epidermal growth factor receptor activation
2022	Hori et al, 2022	10.7554/eLife.73542	Microtubule assembly by tau impairs endocytosis and neurotransmission via dynamin sequestration in Alzheimer's disease synapse model
2022	Huang et al, 2022	10.1083/jcb.202008116	Cell cortex regulation by the planar cell polarity protein Prickle1
2022	Khunta et al, 2022	10.1073/pnas.2204808119	Actin-driven Golgi apparatus dispersal during collective migration of epithelial cells
2022	Lång et al, 2022	10.1073/pnas.2201328119	Mechanical coupling of supracellular stress amplification and tissue fluidization during exit from quiescence
2022	Lee et al, 2022	10.1016/j.cels.2022.05.005	A molecular clock controls periodically driven cell migration in confined spaces
2022	Lin et al, 2022	10.1126/sciadv.abo0323	An AMPK phosphoregulated RhoGEF feedback loop tunes cortical flow–driven amoeboid migration in vivo
2022	Liu et al, 2022	10.1002/smll.202104328	Topographic Cues Guiding Cell Polarization via Distinct Cellular Mechanosensing Pathways
2022	Logan et al, 2022	10.1242/dev.197442	A Diaphanous and Enabled-dependent asymmetric actin cable array repositions nuclei during Drosophila oogenesis
2022	Mishra et al, 2022	10.1242/jcs.259692	Nuclear F-actin and Lamin A antagonistically modulate nuclear shape
2022	Mori et al, 2022	10.1016/j.cub.2022.03.057	Extracellular ATP facilitates cell extrusion from epithelial layers mediated by cell competition or apoptosis
2022	Romero & Carabeo, 2022	10.1242/jcs.260185	Distinct roles of Chlamydia trachomatis effectors TarP and TmeA in the regulation of formin and Arp2/3 during entry
2022	Shi et al, 2022	10.1038/s41467-022-30431-3	Mechanical instability generated by Myosin 19 contributes to mitochondria cristae architecture and OXPHOS

2022	Sprenkeler et al, 2022	10.1182/blood.2021013565	Formation of neutrophil extracellular traps requires actin cytoskeleton rearrangements
2022	Vanderleest et al, 2022	10.1091/mbc.E21-07-0352	Interface extension is a continuum property suggesting a linkage between AP contractile and DV lengthening processes
2022	Yasunaga et al, 2022	10.1038/s41467-022-29741-3	Microridge-like structures anchor motile cilia
2021	Adebowale et al, 2021	10.1038/s41563-021-00981-w	Enhanced substrate stress relaxation promotes filopodia-mediated cell migration
2021	Ali et al, 2021	10.1080/15592324.2021.1920192	Formins control dynamics of F-actin in the central cell of Arabidopsis thaliana
2021	Burrinha et al, 2021	10.1242/jcs.255752	Upregulation of APP endocytosis by neuronal aging drives amyloid-dependent synapse loss
2021	Bourdais et al, 2021	10.1242/jcs.259237	Cofilin regulates actin network homeostasis and microvilli length in mouse oocytes
2021	Chan et al, 2021	10.1073/pnas.2007526118	Evolutionarily related small viral fusogens hijack distinct but modular actin nucleation pathways to drive cell-cell fusion
2021	Chuyen et al, 2021	10.1016/j.devcel.2021.02.026	The Scf/Kit pathway implements self-organized epithelial patterning
2021	Eidell et al, 2021	10.1242/jcs.258602	LFA-1 and kindlin-3 enable the collaborative transport of SLP-76 microclusters by myosin and dynein motors
2021	Flormann et al, 2021	10.3389/fphy.2021.711860	Oscillatory Microrheology, Creep Compliance and Stress Relaxation of Biological Cells Reveal Strong Correlations as Probed by Atomic Force Microscopy
2021	Galotto et al, 2021	10.1093/plphys/kiab435	Myosin XI drives polarized growth by vesicle focusing and local enrichment of F-actin in Physcomitrium patens
2021	German et al, 2021	10.1016/j.celrep.2021.109318	Morphological profiling of human T and NK lymphocytes by high-content cell imaging
2021	Gaston et al, 2021	10.1038/s41467-021-22482-9	EpCAM promotes endosomal modulation of the cortical RhoA zone for epithelial organization
2021	Hiermaier et al, 2021	10.1016/j.jid.2020.09.022	The Actin-Binding Protein α-Adducin Modulates Desmosomal Turnover and Plasticity
2021	Hoijman et al, 2021	10.1038/s41586-021-03200-3	Cooperative epithelial phagocytosis enables error correction in the early embryo
2021	Huang et al, 2021	10.1038/s41467-020-20355-1	Host CDK-1 and formin mediate microvillar effacement induced by enterohemorrhagic Escherichia coli
2021	Ivanov et al, 2021	10.1371/journal.ppat.1010184	Neisseria gonorrhoeae subverts formin-dependent actin polymerization to colonize human macrophages
2021	Landino et al, 2021	10.1016/j.cub.2021.10.021	Rho and F-actin self-organize within an artificial cell cortex
2021	Le et al, 2021	10.1038/s41467-020-20563-9	Adhesion-mediated heterogeneous actin organization governs apoptotic cell extrusion
2021	Liu et al, 2021	10.1002/smll.202104328	Topographic Cues Guiding Cell Polarization via Distinct Cellular Mechanosensing Pathways
2021	Kemp et al, 2021	10.1083/jcb.202103074	Micron-scale supramolecular myosin arrays help mediate cytoskeletal assembly at mature adherens junctions
2021	Ivanova et al, 2021	10.1126/sciadv.abf3873	Control of synaptic vesicle release probability via VAMP4 targeting to endolysosomes
2021	Ma et al, 2021	10.1093/plcell/koab261	Membrane nanodomains modulate formin condensation for actin remodeling in Arabidopsis innate immune responses
2021	Kapoor et al, 2021	10.1016/j.celrep.2021.108918	An actomyosin clamp assembled by the Amphiphysin-Rho1-Dia/DAAM-Rok pathway reinforces somatic cell membrane folded around spermatid heads
2021	Moore et al, 2021	10.1038/s41586-021-03309-5	Actin cables and comet tails organize mitochondrial networks in mitosis

2021	Munjal et al, 2021	10.1016/j.cell.2021.11.025	Extracellular hyaluronate pressure shaped by cellular tethers drives tissue morphogenesis
2021	Shi et al, 2021	10.1093/jmcb/mjab070	Actin nucleator formins regulate the tension-buffering function of caveolin-1
2021	Majmundar et al, 2021	10.1126/sciadv.abe1386	Recessive NOS1AP variants impair actin remodeling and cause glomerulopathy in humans and mice
2021	Prostak et al, 2021	10.1016/j.cub.2021.01.001	The actin networks of chytrid fungi reveal evolutionary loss of cytoskeletal complexity in the fungal kingdom
2021	Kohashi et al, 2021	10.1016/j.cub.2021.06.064	Sequential oncogenic mutations influence cell competition
2021	Rey-Suarez et al, 2021	10.1091/mbc.E20-10-0685	Actomyosin dynamics modulate microtubule deformation and growth during T-cell activation
2021	Lehtimäki et al, 2021	10.7554/eLife.60710	Generation of stress fibers through myosin-driven reorganization of the actin cortex
2021	Schmidt et al. 2021	10.1242/jcs.258973	Dia- and Rok-dependent enrichment of capping proteins in a cortical region
2021	So-hee et al, 2021	10.11620/IJOB.2021.46.3.99	Mechanisms of tissue factor induction by Porphyromonas gingivalis in human endothelial cells
2021	Sakata et al, 2021	10.1111/gtc.12873	Differential effects of the formin inhibitor SMIFH2 on contractility and Ca2+ handling in frog and mouse cardiomyocytes
2021	Schiweck et al, 2021	10.1038/s41467-021-21662-x	Drebrin controls scar formation and astrocyte reactivity upon traumatic brain injury by regulating membrane trafficking
2021	Sun et al, 2021	10.1038/s41467-021-24375-3	Xanthomonas effector XopR hijacks host actin cytoskeleton via complex coacervation
2021	Zhang, et al 2021	10.1093/plphys/kiab085	Analysis of formin functions during cytokinesis using specific inhibitor SMIFH2
2021	Xiao et al, 2021	10.1038/s41598-021-95935-2	Integrated computational and experimental pipeline for quantifying local cell–matrix interactions
2021	Laplaud et al, 2021	10.1126/sciadv.abe3640	Pinching the cortex of live cells reveals thickness instabilities caused by myosin II motors
2021	Fischer et al, 2021	10.1073/pnas.2021135118	Contractility, focal adhesion orientation, and stress fiber orientation drive cancer cell polarity and migration along wavy ECM substrates
2021	Ma et al, 2021	10.1016/j.celrep.2021.108884	Formin nanoclustering-mediated actin assembly during plant flagellin and DSF signaling
2021	Valencia et al, 2021	10.1016/j.devcel.2021.11.004	Force-dependent activation of actin elongation factor mDia1 protects the cytoskeleton from mechanical damage and promotes stress fiber repair
2021	Monzo et al, 2021	10.1016/j.devcel.2021.09.007	Adaptive mechanoproperties mediated by the formin FMN1 characterize glioblastoma fitness for invasion
2021	Pocaterra et al. 2021	10.1038/s42003-021-02286-9	Fascin1 empowers YAP mechanotransduction and promotes cholangiocarcinoma development
2021	Sugizaki et al, 2021	10.1073/pnas.2019071118	POLArIS, a versatile probe for molecular orientation, revealed actin filaments associated with microtubule asters in early embryos
2021	Bischoff et al, 2021	10.1038/s41467-020-20362-2	Filopodia-based contact stimulation of cell migration drives tissue morphogenesis
2021	Nishimura, et al 2021	10.1016/j.cdev.2021.203736	Crosstalk between myosin II and formin functions in the regulation of force generation and actomyosin dynamics in stress fibers
2021	Nishimura, et al 2021	10.1242/jcs.253708	The Formin Inhibitor, SMIFH2, Inhibits Members of the Myosin Superfamily
2021	Tertrais, et al 2021	10.1016/j.ejcb.2021.151161	Phagocytosis is coupled to the formation of phagosome-associated podosomes and a transient disruption of podosomes in human macrophages
2021	Vorselem, et al 2021	10.7554/eLife.68627	Phagocytic 'teeth' and myosin-II 'jaw' power target constriction during phagocytosis
2021	Yu et al, 2021	10.1083/jcb.202007172	Endophilin A1 drives acute structural plasticity of dendritic spines in response to Ca2+/calmodulin

2021	Zhang et al, 2021	10.1007/s12035-021-02531-6	Formin Activity and mDia1 Contribute to Maintain Axon Initial Segment Composition and Structure
2021	Zhao et al, 2021	10.1126/sciadv.abg4934	Hydraulic resistance induces cell phenotypic transition in confinement
2020	Pfisterer et al, 2020	10.1083/jcb.201906111	FMNL2 regulates dynamics of fascin in filopodia
2020	Chan et al, 2020	10.7554/eLife.51358	A viral fusogen hijacks the actin cytoskeleton to drive cell-cell fusion
2020	Walpole et al, 2021	10.1016/j.celrep.2020.107721	Inactivation of Rho GTPases by Burkholderia cenocepacia Induces a WASH-Mediated Actin Polymerization that Delays Phagosome Maturation
2020	Ma et al, 2020	10.1242/jcs.236794	Arp2/3 nucleates F-actin coating of fusing insulin granules in pancreatic β cells to control insulin secretion
2020	Blumenthal et al, 2020	10.7554/eLife.55995	Mouse T cell priming is enhanced by maturation-dependent stiffening of the dendritic cell cortex
2020	Cangkrama et al, 2020	10.15252/emmm.201911466	A paracrine activin A–mDia2 axis promotes squamous carcinogenesis via fibroblast reprogramming
2020	Colin-York, et al 2020	10.1242/jcs.232322	Distinct actin cytoskeleton behaviour in primary and immortalised T-cells
2020	Lionetti et al, 2020	10.1016/j.bpj.2020.04.001	Chromatin and Cytoskeletal Tethering Determine Nuclear Morphology in Progerin-Expressing Cells
2020	Cavanaugh et al, 2020	10.1016/j.devcel.2019.12.002	RhoA Mediates Epithelial Cell Shape Changes via Mechanosensitive Endocytosis
2020	Davidson et al, 2020	10.15252/embr.201949910	Nesprin-2 accumulates at the front of the nucleus during confined cell migration
2020	Moorthy et al, 2020	10.1111/cmi.13196	Matrix stiffness regulates endosomal escape of uropathogenic E. coli
2020	Nunes et al, 2020	10.1091/mbc.E20-01-0047	Centrosome–nuclear axis repositioning drives the assembly of a bipolar spindle scaffold to ensure mitotic fidelity
2020	Moose et al, 2020	10.1016/j.celrep.2020.02.080	Cancer Cells Resist Mechanical Destruction in Circulation via RhoA/Actomyosin-Dependent Mechano-Adaptation
2020	Pinto-Costa et al, 2020	10.1172/JCI125771	Profilin 1 delivery tunes cytoskeletal dynamics toward CNS axon regeneration
2020	Pollitt et al, 2020	10.1091/mbc.E20-06-0366	LIM and SH3 protein 1 localizes to the leading edge of protruding lamellipodia and regulates axon development
2020	Avarez-Elizondo et al, 2020	10.1007/s10439-020-02679-7	Actin as a Target to Reduce Cell Invasiveness in Initial Stages of Metastasis
2020	Kang et al, 2020	10.1091/mbc.E19-11-0602	Angiomotin links ROCK and YAP signaling in mechanosensitive differentiation of neural stem cells
2020	Stankevicins et al, 2020	10.1073/pnas.1907845117	Deterministic actin waves as generators of cell polarization cues
2020	Chaudhuri, et al 2020	10.1002/adbi.202000143	Modulating T Cell Activation Using Depth Sensing Topographic Cues
2020	Limzerwala et al, 2020	10.1038/s43018-020-00116-1	FoxM1 insufficiency hyperactivates Ect2–RhoA–mDia1 signaling to drive cancer
2020	Velle et al, 2020	10.1083/jcb.202007158	Conserved actin machinery drives microtubule-independent motility and phagocytosis in Naegleria
2020	Ecke et al, 2020	10.1091/mbc.E19-08-0460	Formins specify membrane patterns generated by propagating actin waves
2020	Green et al, 2020	10.1111/jth.14735	SMIFH2 inhibition of platelets demonstrates a critical role for formin proteins in platelet cytoskeletal dynamics
2020	Nguyen, et al, 2020	10.1007/s12195-019-00603-1	Differential Contributions of Actin and Myosin to the Physical Phenotypes and Invasion of Pancreatic Cancer Cells

2020	Liu et al, 2020	10.1096/fj.201903033R	Protein diaphanous homolog 1 (Diaph1) promotes myofibroblastic activation of hepatic stellate cells by regulating Rab5a activity and TGF beta receptor endocytosis
2020	Cao et al, 2020	10.1038/s41556-020-0531-y	SPIN90 associates with mDia1 and the Arp2/3 complex to regulate cortical actin organization
2020	Kim et al, 2020	10.1038/s41556-020-0468-1	Optogenetic control of mRNA localization and translation in live cells
2020	Thumkeo et al, 2020	10.1126/sciadv.aay2432	mDia1/3-dependent actin polymerization spatiotemporally controls LAT phosphorylation by Zap70 at the immune synapse
2020	Teo et al, 2020	10.1016/j.devcel.2020.05.002	Caveolae Control Contractile Tension for Epithelia to Eliminate Tumor Cells
2020	Hoffman et al, 2020	10.1091/mbc.E19-01-0027	Mechanical stress triggers nuclear remodeling and the formation of transmembrane actin nuclear lines with associated nuclear pore complexes
2020	Di Cio et al, 2020	10.1016/j.biomaterials.2019.119683	Contractile myosin rings and cofilin-mediated actin disassembly orchestrate ECM nanotopography sensing
2020	Meyer et al, 2020	10.15252/msb.20198985	Bile canaliculi remodeling activates YAP via the actin cytoskeleton during liver regeneration
2020	Bhosle et al, 2020	10.1038/s41467-020-17651-1	SLIT2/ROBO1-signaling inhibits macropinocytosis by opposing cortical cytoskeletal remodeling
2020	Kühn et al, 2020	10.1016/j.celrep.2020.107638	Actin Assembly around the Shigella-Containing Vacuole Promotes Successful Infection
2020	Sil et al, 2020	10.1091/mbc.E18-11-0715	Dynamic actin-mediated nano-scale clustering of CD44 regulates its meso-scale organization at the plasma membrane
2020	Zuidscherwoude et al, 2020	10.1080/09537104.2020.1822522	Loss of mDia1 and Fhod1 impacts platelet formation but not platelet function
2020	Yaniv et al, 2020	10.1083/jcb.201903181	Developmental axon regrowth and primary neuron sprouting utilize distinct actin elongation factors
2020	Zhang et al, 2020	10.1074/jbc.RA119.012260	Proline-rich 11 (PRR11) drives F-actin assembly by recruiting the actin-related protein 2/3 complex in human non-small cell lung carcinoma
2020	Zhu et al, 2020	10.1126/science.abd270	Developmental clock and mechanism of de novo polarization of the mouse embryo
2019	Meka et al, 2019	10.15252/embr.201947743	Radial somatic F-actin organization affects growth cone dynamics during early neuronal development
2019	Ajeti et al, 2019	10.1038/s41567-019-0485-9	Wound healing coordinates actin architectures to regulate mechanical work
2019	Aspenstrom, 2019	10.3390/cells8070759	The Intrinsic GDP/GTP Exchange Activities of Cdc42 and Rac1 Are Critical Determinants for Their Specific Effects on Mobilization of the Actin Filament System
2019	Corkins et al, 2019	10.1371/journal.pone.0221698	Divergent roles of the Wnt/PCP Formin Daam1 in renal ciliogenesis
2019	Kalappurakkal et al, 2019	10.1016/j.cell.2019.04.037	Integrin Mechano-chemical Signaling Generates Plasma Membrane Nanodomains that Promote Cell Spreading
2019	Miller and Blystone, 2019	10.1002/jcb.28694	The carboxy-terminus of the formin FMNL1ɣ bundles actin to potentiate adenocarcinoma migration
2019	Ditlev et al, 2019	10.7554/eLife.42695	A composition-dependent molecular clutch between T cell signaling condensates and actin
2019	Dudin et al, 2019	10.7554/eLife.49801	A unicellular relative of animals generates a layer of polarized cells by actomyosin-dependent cellularization
2019	Eaton et al, 2019	10.1091/mbc.E19-02-0115	Expansion and contraction of the umbrella cell apical junctional ring in response to bladder filling and voiding

2019	Gao et al, 2019	10.1073/pnas.1903763116	Genetic dissection of active forgetting in labile and consolidated memories in Drosophila
2019	Luo et al, 2019	10.1038/s41467-019-10241-w	Atypical function of a centrosomal module in WNT signalling drives contextual cancer cell motility
2019	Roesler et al, 2019	10.3389/fncel.2019.00330	Myosin XVI Regulates Actin Cytoskeleton Dynamics in Dendritic Spines of Purkinje Cells and Affects Presynaptic Organization
2019	Jaumouillé, et al, 2019	10.1038/s41556-019-0414-2	Coupling of β2 integrins to actin by a mechanosensitive molecular clutch drives complement receptor-mediated phagocytosis
2019	Hsieh et al, 2019	10.1038/s41467-019-08924-5	Omegasome-proximal PtdIns(4,5)P2 couples F-actin mediated mitoaggregate disassembly with autophagosome formation during mitophagy
2019	Jalal et al, 2019	10.1242/jcs.220780	Actin cytoskeleton self-organization in single epithelial cells and fibroblasts under isotropic confinement
2019	Lu et al, 2019	10.1073/pnas.1910166116	Membrane curvature underlies actin reorganization in response to nanoscale surface topography
2019	Melzer et al, 2019	10.3390/ijms20040876	Involvement of Actin Cytoskeletal Components in Breast Cancer Cell Fusion with Human Mesenchymal Stroma/Stem-Like Cells
2019	Strieder-Barboza et al, 2019	10.1038/s41598-019-56242-z	Advanced glycation end-products regulate extracellular matrix-adipocyte metabolic crosstalk in diabetes.
2019	Mohan et al, 2019	10.1016/j.devcel.2019.04.007	Enhanced Dendritic Actin Network Formation in Extended Lamellipodia Drives Proliferation in Growth-Challenged Rac1P29S Melanoma Cells
2019	Puleo et al, 2019	10.1083/jcb.201902101	Mechanosensing during directed cell migration requires dynamic actin polymerization at focal adhesions
2019	Xia et al, 2019	10.1016/j.celrep.2019.06.089	Nanoscale Architecture of the Cortical Actin Cytoskeleton in Embryonic Stem Cells
2019	Stephenson et al, 2019	10.1016/j.devcel.2019.01.016	Rho Flares Repair Local Tight Junction Leaks
2019	Kita et al, 2019	10.1091/mbc.E19-02-0126	Spindle–F-actin interactions in mitotic spindles in an intact vertebrate epithelium
2019	Plessner et al, 2019	10.1016/j.isci.2019.04.022	Centrosomal Actin Assembly Is Required for Proper Mitotic Spindle Formation and Chromosome Congression
2019	Lee et al, 2019	10.1128/MCB.00107-19	CCN1–Yes-Associated Protein Feedback Loop Regulates Physiological and Pathological Angiogenesis
2019	Guetta-Terrier et al, 2019	10.1083/jcb.201501106	Protrusive waves guide 3D cell migration along nanofibers
2019	Chistensen, et al 2019	doi: 10.1091/mbc.e19-08-0463	Chlamydomonas reinhardtii formin FOR1 and profilin PRF1 are optimized for acute rapid actin filament assembly
2019	Vohnoutka et al, 2019	10.1091/mbc.E19-08-0442	The focal adhesion scaffold protein Hic-5 regulates vimentin organization in fibroblast
2019	Zhang et al, 2019	10.1016/j.bbrc.2019.09.047	The migration direction of hair cell nuclei is closely related to the perinuclear actin filaments in Arabidopsis
2019	Alieva et al, 2019	10.1038/s41467-019-10964-w	Myosin IIA and formin dependent mechanosensitivity of filopodia adhesion
2019	Gulvady et al, 2019	10.1091/mbc.E18-10-0629	Hic-5 regulates Src-induced invadopodia rosette formation and organization
2019	Glebov, 2019	10.1002/cbin.11226	Distinct molecular mechanisms control levels of synaptic F-actin
2019	Khalilgharibi, et al 2019	10.1038/s41567-019-0516-6	Stress relaxation in epithelial monolayers is controlled by the actomyosin cortex
2019	Eftekharjoo et al, 2019	10.1016/j.bbrc.2019.01.035	Fibrillar force generation by fibroblasts depends on formin

2019	Moreau et al, 2019	10.1016/j.devcel.2019.03.024	Macropinocytosis Overcomes Directional Bias in Dendritic Cells Due to Hydraulic Resistance and Facilitates Space Exploration
2019	Shamipour et al, 2019	10.1016/j.cell.2019.04.030	Bulk Actin Dynamics Drive Phase Segregation in Zebrafish Oocytes
2019	van Bommel, et al 2019	10.15252/embj.2018101183	F-actin patches associated with glutamatergic synapses control positioning of dendritic lysosomes
2019	Roper et al, 2019	10.7554/eLife.48093	B cells extract antigens at Arp2/3-generated actin foci interspersed with linear filaments
2019	Singh et al, 2019	10.1128/mBio.02434-19	Measles Virus Ribonucleoprotein Complexes Rapidly Spread across Well-Differentiated Primary Human Airway Epithelial Cells along F-Actin Rings
2019	Pettee et al., 2019	10.3390/cancers11030392	Targeting the mDia Formin-Assembled Cytoskeleton Is an Effective Anti-Invasion Strategy in Adult High-Grade Glioma Patient-Derived Neurospheres
2019	Tsopoulidis et al, 2019	10.1126/sciimmunol.aav1987	T cell receptor–triggered nuclear actin network formation drives CD4+ T cell effector functions
2019	Yan et al, 2019	10.1016/j.isci.2019.05.040	In Vivo F-Actin Filament Organization during Lymphocyte Transendothelial and Interstitial Migration Revealed by Intravital Microscopy
2019	Sun et al, 2019	10.1016/j.celrep.2019.10.128	Maintenance of Primary Hepatocyte Functions In Vitro by Inhibiting Mechanical Tension-Induced YAP Activation
2019	Ong et al, 2019	10.1242/jcs.224378	Multiple feedback mechanisms fine-tune Rho signaling to regulate morphogenetic outcomes
2019	Huang et al, 2019	10.3390/cells8101264	Arp2/3-Branched Actin Maintains an Active Pool of GTP-RhoA and Controls RhoA Abundance
2019	Drewry et al, 2019	10.1038/s41564-019-0504-8	The secreted kinase ROP17 promotes Toxoplasma gondii dissemination by hijacking monocyte tissue migration
2019	Inoue et al, 2019	10.15252/embj.201899630	Actin filaments regulate microtubule growth at the centrosome
2019	Molinie et al, 2019	10.1038/s41422-019-0160-9	Cortical branched actin determines cell cycle progression
2019	Vogt et al, 2019	10.1038/s41467-019-10171-7	Anchoring cortical granules in the cortex ensures trafficking to the plasma membrane for post-fertilization exocytosis
2019	Yanakieva et al, 2019	10.1083/jcb.201901077	Cell and tissue morphology determine actin-dependent nuclear migration mechanisms in neuroepithelia
2019	Bucki et al, 2019	10.1074/jbc.RA118.005552	Lateral distribution of phosphatidylinositol 4,5-bisphosphate in membranes regulates formin- and ARP2/3-mediated actin nucleation
2018	Argenzio et al, 2018	10.1074/jbc.RA118.002779	Profilin binding couples chloride intracellular channel protein CLIC4 to RhoA–mDia2 signaling and filopodium formation
2018	Brigida et al, 2018	10.1182/blood-2018-07-863431	T-cell defects in patients with ARPC1B germline mutations account for combined immunodeficiency
2018	Bun et al, 2018	10.7554/eLife.31469	A disassembly-driven mechanism explains F-actin-mediated chromosome transport in starfish oocytes
2018	Gao et al, 2018	10.1002/jcp.27078	Cirrhotic stiffness affects the migration of hepatocellular carcinoma cells and induces sorafenib resistance through YAP
2018	Carisey et al, 2018	10.1016/j.cub.2017.12.044	Nanoscale Dynamism of Actin Enables Secretory Function in Cytolytic Cells
2018	Sepúlveda-Ramírez et al, 2018	10.1016/j.ydbio.2018.03.015	Cdc42 controls primary mesenchyme cell morphogenesis in the sea urchin embryo
2018	Velle et al, 2018	10.1371/journal.ppat.1007485	Enteropathogenic E. coli relies on collaboration between the formin mDia1 and the Arp2/3 complex for actin pedestal biogenesis and maintenance

2018	Liu et al, 2018	10.1016/j.molp.2018.09.004	Actin Polymerization Mediated by AtFH5 Directs the Polarity Establishment and Vesicle Trafficking for Pollen Germination in Arabidopsis
2018	Huang et al, 2018	10.1038/s41467-018-04710-x	Rice actin binding protein RMD controls crown root angle in response to external phosphate
2018	Aihara et al, 2018	10.1242/jcs.216317	Cell injury triggers actin polymerization to initiate epithelial restitution
2018	Chakrabarty et al, 2018	10.1083/jcb.201711022	Processive flow by biased polymerization mediates the slow axonal transport of actin
2018	Dvorak et al, 2018	10.1371/journal.pone.0195278	Carcinoma associated fibroblasts (CAFs) promote breast cancer motility by suppressing mammalian Diaphanous-related formin-2 (mDia2)
2018	Fernández-Barrera et al, 2018	10.1083/jcb.201702157	The actin-MRTF-SRF transcriptional circuit controls tubulin acetylation via α-TAT1 gene expression
2018	Ford et al, 2018	10.1371/journal.ppat.1007051	Chlamydia exploits filopodial capture and a macropinocytosis-like pathway for host cell entry
2018	Ray et al, 2018	10.1073/pnas.1808052115	Intrinsic cellular chirality regulates left–right symmetry breaking during cardiac looping
2018	Higuchi-Sanabria et al, 2018	10.1091/mbc.E18-06-0362	Spatial regulation of the actin cytoskeleton by HSF-1 during aging
2018	Weise-Cross et al, 2018	10.1152/ajpheart.00664.2017	Actin polymerization contributes to enhanced pulmonary vasoconstrictor reactivity after chronic hypoxia
2018	Logue et al, 2018	10.1038/s41388-017-0071-5	c-Src activity is differentially required by cancer cell motility modes
2018	Kim et al, 2018	10.1096/fj.201801429RR	Stress hormone signaling through β-adrenergic receptors regulates macrophage mechanotype and function
2018	Kruppa et al, 2018	10.1016/j.devcel.2018.01.007	Myosin VI-Dependent Actin Cages Encapsulate Parkin-Positive Damaged Mitochondria
2018	Kudryashova et al, 2018	10.1016/j.cub.2018.03.065	Actin Cross-Linking Toxin Is a Universal Inhibitor of Tandem-Organized and Oligomeric G-Actin Binding Proteins
2018	Yasuda-Yamahara et al, 2018	10.1016/j.matbio.2018.01.003	FERMT2 links cortical actin structures, plasma membrane tension and focal adhesion function to stabilize podocyte morphology
2018	Mahuzier et al, 2018	10.1038/s41467-018-04676-w	Ependymal cilia beating induces an actin network to protect centrioles against shear stress
2018	Rana et al, 2018	10.1091/mbc.E17-05-0325	Formin-dependent TGF-beta signaling for epithelial to mesenchymal transition
2018	Silveira et al, 2018	10.1189/jlb.3A0916-388RR	TNF induces neutrophil adhesion via formin-dependent cytoskeletal reorganization and activation of beta-integrin function
2018	Fessendon et al, 2018	10.1083/jcb.201703145	Dia1-dependent adhesions are required by epithelial tissues to initiate invasion
2018	Pfanzelter et al, 2018	10.1083/jcb.201708091	Septins suppress the release of vaccinia virus from infected cells
2018	Schrank et al, 2018	10.1038/s41586-018-0237-5	Nuclear ARP2/3 drives DNA break clustering for homology-directed repair
2018	McRae et al, 2018	10.1080/21688370.2017.1405774	Characterization of cell-cell junction changes associated with the formation of a strong endothelial barrier
2018	Prashar et al, 2018	10.3389/fcimb.2018.00133	Small Rho GTPases and the Effector VipA Mediate the Invasion of Epithelial Cells by Filamentous Legionella pneumophila
2018	Ripoli et al, 2018	10.1083/jcb.201709055	Myosin VI and branched actin filaments mediate membrane constriction and fission of melanosomal tubule carriers
2018	Terry et al, 2018	10.1073/pnas.1722281115	Capping protein regulates actin dynamics during cytokinetic midbody maturation

2018	Copeland et al, 2018	10.1091/mbc.E18-02-0088	Actin-dependent regulation of cilia length by the inverted formin FHDC1
2018	Xiang et al, 2018	10.4049/jimmunol.1701805	β1 Integrins Are Required To Mediate NK Cell Killing of Cryptococcus neoformans
2018	Schell et al, 2018	10.1016/j.devcel.2018.11.011	ARP3 Controls the Podocyte Architecture at the Kidney Filtration Barrier
2018	Tabdanov, et al, 2018	10.1038/s41467-018-07290-y	Bimodal sensing of guidance cues in mechanically distinct microenvironments
2018	Sakamoto, et al 2018	10.1371/journal.pbio.2004874	mDia1/3 generate cortical F-actin meshwork in Sertoli cells that is continuous with contractile F-actin bundles and indispensable for spermatogenesis and male fertility
2018	Sathe et al, 2018	10.1038/s41467-018-03955-w	Small GTPases and BAR domain proteins regulate branched actin polymerisation for clathrin and dynamin-independent endocytosis
2018	Matsuzawa et al, 2018	10.1016/j.celrep.2018.05.070	α-Catenin Controls the Anisotropy of Force Distribution at Cell-Cell Junctions during Collective Cell Migration
2018	Zenker et al, 2018	10.1016/j.cell.2018.02.035	Expanding Actin Rings Zipper the Mouse Embryo for Blastocyst Formation
2018	Fenix et al, 2018	10.7554/eLife.42144	Muscle-specific stress fibers give rise to sarcomeres in cardiomyocytes
2018	Hirata et al, 2018	10.1111/cas.13816	Active K-RAS induces the coherent rotation of epithelial cells: A model for collective cell invasion in vitro
2018	Whitson et al, 2018	10.1038/nm.4476	Noncanonical hedgehog pathway activation through SRF–MKL1 promotes drug resistance in basal cell carcinomas
2018	Williams & Kay, 2018	10.1242/jcs.213736	The physiological regulation of macropinocytosis during Dictyostelium growth and development
2018	Wu et al, 2018	10.1083/jcb.201802039	Actin and microtubule cross talk mediates persistent polarized growth
2017	Bharadwaj et al, 2017	10.1038/ncomms14348	αV-class integrins exert dual roles on α5β1 integrins to strengthen adhesion to fibronectin
2017	Beach et al, 2017	10.1038/ncb3463	Actin dynamics and competition for myosin monomer govern the sequential amplification of myosin filaments
2017	Chew et al, 2017	10.1083/jcb.201701104	Actin turnover maintains actin filament homeostasis during cytokinetic ring contraction
2017	Collins et al, 2017	10.1073/pnas.1618676114	Changes in E-cadherin rigidity sensing regulate cell adhesion
2017	Delaney, et al 2017	10.1073/pnas.1700247114	Distinct functions of diaphanous-related formins regulate HIV-1 uncoating and transport
2017	Foster et al, 2017	10.1101/gad.304501.117	Mutual dependence of the MRTF–SRF and YAP–TEAD pathways in cancer-associated fibroblasts is indirect and mediated by cytoskeletal dynamics
2017	Fritzsche et al, 2017	10.1126/sciadv.1603032	Cytoskeletal actin dynamics shape a ramifying actin network underpinning immunological synapse formation
2017	Schwartz et al, 2017	10.1038/s41598-017-01324-z	Lamins and nesprin-1 mediate inside-out mechanical coupling in muscle cell precursors through FHOD1
2017	Hu et al, 2017	10.1038/ncb3466	Long-range self-organization of cytoskeletal myosin II filament stacks
2017	Hui et al, 2017	10.1073/pnas.1614291114	Dynamic microtubules regulate cellular contractility during T-cell activatio
2017	Lopes et al, 2017	10.1083/jcb.201608094	Membrane nanoclusters of FcγRI segregate from inhibitory SIRPα upon activation of human macrophages
2017	Qu et al, 2017	10.1016/j.molp.2017.05.002	Organizational Innovation of Apical Actin Filaments Drives Rapid Pollen Tube Growth and Turning
2017	Qu et al, 2017	10.1083/jcb.201701045	Stabilization of dynamic microtubules by mDia1 drives Tau-dependent Aβ1–42 synaptotoxicity
2017	Spadaro et al, 2017	10.1016/j.cub.2017.11.014	Tension-Dependent Stretching Activates ZO-1 to Control the Junctional Localization of Its Interactors

2017	Wu et al, 2017	10.1016/j.bpj.2016.12.035	Two Distinct Actin Networks Mediate Traction Oscillations to Confer Focal Adhesion Mechanosensing
2017	Miller et al, 2017	10.1242/jcs.195099v	Non-canonical activity of the podosomal formin FMNL1γ supports immune cell migration
2017	Nager et al, 2017	10.1016/j.cell.2016.11.036	An Actin Network Dispatches Ciliary GPCRs into Extracellular Vesicles to Modulate Signaling
2017	Oakes et al., 2017	10.1038/ncomms15817	Optogenetic control of RhoA reveals zyxin-mediated elasticity of stress fibres
2017	Öztürk et al, 2017	10.1016/j.yexcr.2017.08.033	RhoA activation and nuclearization marks loss of chondrocyte phenotype in crosstalk with Wnt pathway
2017	Panzica et al, 2017	10.1083/jcb.201702020	F-actin prevents interaction between sperm DNA and the oocyte meiotic spindle in C. elegans
2017	Parisis et al, 2017	10.15252/embj.201796585	Initiation of DNA replication requires actin dynamics and formin activity
2017	Pfisterer et al, 2017	10.1038/ncomms14858	Role for formin-like 1-dependent acto-myosin assembly in lipid droplet dynamics and lipid storage
2017	Archarya et al, 2017	10.1016/j.celrep.2017.02.078	Mammalian Diaphanous 1 Mediates a Pathway for E-cadherin to Stabilize Epithelial Barriers through Junctional Contractility
2017	Taniguchi et al, 2017	10.1083/jcb.201704085	An apicosome initiates self-organizing morphogenesis of human pluripotent stem cells
2017	Tomoshige et al, 2017	10.1016/j.ygcen.2017.08.021	Cytoskeleton-related regulation of primary cilia shortening mediated by melanin-concentrating hormone receptor 1
2017	Balasanyan et al, 2017	10.1016/j.celrep.2017.11.046	Structure and Function of an Actin-Based Filter in the Proximal Axon
2017	Soykan et al, 2017	10.1016/j.neuron.2017.02.011	Synaptic Vesicle Endocytosis Occurs on Multiple Timescales and Is Mediated by Formin-Dependent Actin Assembly
2017	Stromeyer et al, 2017	10.1038/nmat5023	Fibronectin-bound α5β1 integrins sense load and signal to reinforce adhesion in less than a second
2017	van der Kammen et al, 2017	10.1242/dev.156323	Knockout of the Arp2/3 complex in epidermis causes a psoriasis-like disease hallmarked by hyperactivation of transcription factor Nrf2
2017	Wyse et al, 2017	10.1016/j.bbrc.2017.01.087	mDia2 and CXCL12/CXCR4 chemokine signaling intersect to drive tumor cell amoeboid morphological transitions
2017	You et al, 2017	10.1158/0008-5472.CAN-17-0657	SPIN90 Depletion and Microtubule Acetylation Mediate Stromal Fibroblast Activation in Breast Cancer Progression
2017	Zaritsky et al, 2017	10.1083/jcb.201609095	Diverse roles of guanine nucleotide exchange factors in regulating collective cell migration
2017	Zhang et al, 2017	10.1093/jmicro/dfx015	In vivo dynamics of the cortical actin network revealed by fast-scanning atomic force microscopy
2016	Acharya et al, 2016	10.1242/jcs.173674	KIF17 regulates RhoA-dependent actin remodeling at epithelial cell–cell adhesions
2016	Bernau et al, 2016	10.1165/rcmb.2016-0104OC	Tensin 1 Is Essential for Myofibroblast Differentiation and Extracellular Matrix Formation
2016	Dubey et al, 2016	10.1016/j.devcel.2016.07.001	Localized, Reactive F-Actin Dynamics Prevents Abnormal Somatic Cell Penetration by Mature Spermatids
2016	Jasnin et al, 2016	10.1016/j.str.2016.05.004	Actin Organization in Cells Responding to a Perforated Surface, Revealed by Live Imaging and Cryo-Electron Tomography
2016	Nejedla et al, 2016	10.1091/mbc.E15-11-0799	Profilin connects actin assembly with microtubule dynamics
2016	Farina et al, 2016	10.1038/ncb3285	The centrosome is an actin-organizing centre
2016	Luo et al, 2016	10.1371/journal.pone.0163915	Formin DAAM1 Organizes Actin Filaments in the Cytoplasmic Nodal Actin Network
2016	Toshima et al, 2016	10.7554/eLife.10276	Yeast Eps15-like endocytic protein Pan1p regulates the interaction between endocytic vesicles, endosomes and the actin cytoskeleton

2016	Heuserman n et al, 2016	10.1083/jcb.201 506084	Exosomes surf on filopodia to enter cells at endocytic hot spots, traffic within endosomes, and are targeted to the ER
2016	Gargini et al, 2016	10.1016/j.celre p.2016.10.064	WIP Drives Tumor Progression through YAP/TAZ-Dependent Autonomous Cell Growth
2016	Delevoye et al, 2016	10.1016/j.cub.2 015.11.020	BLOC-1 Brings Together the Actin and Microtubule Cytoskeletons to Generate Recycling Endosomes
2016	Panzer et al, 2016	10.1242/jcs.177 691	The formins FHOD1 and INF2 regulate inter- and intra-structural contractility of podosomes
2016	Ziske et al, 2016	10.1016/j.bbrc. 2016.02.049	SMIFH2-mediated mDia formin functional inhibition potentiates chemotherapeutic targeting of human ovarian cancer spheroids
2016	Cao et al, 2016	10.1104/pp.15. 01321	Profilin-Dependent Nucleation and Assembly of Actin Filaments Controls Cell Elongation in Arabidopsis
2016	Michael et al, 2016	10.1016/j.devce l.2016.03.008	Coronin 1B Reorganizes the Architecture of F-Actin Networks for Contractility at Steady-State and Apoptotic Adherens Junctions
2016	Kuroda et al, 2016	10.1038/srep34 809	Diaphanous gene mutation affects spiral cleavage and chirality in snails
2016	Leithner et al, 2016	10.1038/ncb342 6	Diversified actin protrusions promote environmental exploration but are dispensable for locomotion of leukocytes
2016	Borinskaya et al, 2016	10.1091/mbc.E 14-11-1555	Integration of linear and dendritic actin nucleation in Nck-induced actin comets
2016	Basu et al, 2016	10.1523/ENEU RO.0302-16.2016	Arp2/3 and VASP Are Essential for Fear Memory Formation in Lateral Amygdala
2016	Fritzsche et al., 2016	10.1126/sciadv. 1501337	Actin kinetics shapes cortical network structure and mechanics
2016	Rengarajan et al, 2016	10.1371/journa l.ppat.1005603	Endothelial Cells Use a Formin-Dependent Phagocytosis-Like Process to Internalize the Bacterium Listeria monocytogenes
2016	Rao et al, 2016	10.1091/mbc.E 16-06-0429	Formin-mediated actin polymerization at cell–cell junctions stabilizes E-cadherin and maintains monolayer integrity during wound repair
2016	Monzo et al, 2016	10.1091/mbc.E 15-08-0565	Mechanical confinement triggers glioma linear migration dependent on formin FHOD3
2016	Moore et al, 2016	10.1038/ncom ms12886	Dynamic actin cycling through mitochondrial subpopulations locally regulates the fission–fusion balance within mitochondrial networks
2016	Murugesan et al, 2016	10.1083/jcb.201 603080	Formin-generated actomyosin arcs propel T cell receptor microcluster movement at the immune synapse
2016	Sari-Hassoun et al, 2016	10.1016/j.bcp.2 015.12.013	Cucurbitacin I elicits the formation of actin/phospho-myosin II co-aggregates by stimulation of the RhoA/ROCK pathway and inhibition of LIM-kinase
2016	Sedzinski et al, 2016	10.1016/j.devce l.2015.12.013	Emergence of an Apical Epithelial Cell Surface In Vivo
2016	Stritt et al, 2016	10.1182/blood-2015-10-675629	A gain-of-function variant in DIAPH1 causes dominant macrothrombocytopenia and hearing loss
2016	Hadjiantoni ou et al, 2016	10.1098/rsif.20 16.0613	Physical confinement signals regulate the organization of stem cells in three dimensions
2016	Qu et al, 2016	10.1091/mbc.e 16-10-0727	Periodic actin structures in neuronal axons are required to maintain microtubules
2016	Wales et al, 2016	10.7554/eLife.1 9850	Calcium-mediated actin reset (CaAR) mediates acute cell adaptations
2016	Wen et al, 2016	10.1038/ncom ms12604	Actin dynamics provides membrane tension to merge fusing vesicles into the plasma membrane
2015	Eghiaian et al, 2015	10.1016/j.bpj.2 015.01.016	Structural, Mechanical, and Dynamical Variability of the Actin Cortex in Living Cells
2015	Grega-Larson et al, 2015	10.1091/mbc.E 15-06-0443	Cordon bleu promotes the assembly of brush border microvilli

2015	Roy et al, 2015	10.1083/jcb.201506110	A dynamic formin-dependent deep F-actin network in axons
2015	Heisler et al, 2015	10.1126/science.aab4090	ACD toxin–produced actin oligomers poison formin-controlled actin polymerization
2015	Vargas et al, 2015	10.1038/ncb3284	Innate control of actin nucleation determines two distinct migration behaviours in dendritic cells
2015	Barry et al, 2015	10.1083/jcb.201501081	Open source software for quantification of cell migration, protrusions, and fluorescence intensities
2015	Vitriol et al, 2015	10.1016/j.celrep.2015.03.033	Two Functionally Distinct Sources of Actin Monomers Supply the Leading Edge of Lamellipodia
2015	Henson et al, 2015	10.1091/mbc.E14-07-1244	Arp2/3 complex inhibition radically alters lamellipodial actin architecture, suspended cell shape, and the cell spreading process
2015	Katsuno et al, 2015	10.1016/j.celrep.2015.06.048	Actin Migration Driven by Directional Assembly and Disassembly of Membrane-Anchored Actin Filaments
2015	Lee et al, 2015	10.1016/j.cels.2015.07.001	Functional Hierarchy of Redundant Actin Assembly Factors Revealed by Fine-Grained Registration of Intrinsic Image Fluctuations
2015	Kanellos et al, 2015	10.1016/j.celrep.2015.10.056	ADF and Cofilin1 Control Actin Stress Fibers, Nuclear Integrity, and Cell Survival
2015	Taniguchi et al, 2015	10.1016/j.stemcr.2015.10.015	Lumen Formation Is an Intrinsic Property of Isolated Human Pluripotent Stem Cells
2015	Makhija et al, 2015	10.1073/pnas.1513189113	Nuclear deformability and telomere dynamics are regulated by cell geometric constraints
2015	Tornavaca et al, 2015	10.1083/jcb.201404140	ZO-1 controls endothelial adherens junctions, cell–cell tension, angiogenesis, and barrier formation
2015	Fattouh et al, 2015	10.1093/infdis/jiu546	The Diaphanous-Related Formins Promote Protrusion Formation and Cell-to-Cell Spread of Listeria monocytogenes
2015	Paul et al, 2015	10.1083/jcb.201502040	α5β1 integrin recycling promotes Arp2/3-independent cancer cell invasion via the formin FHOD3
2015	Suraneni et al, 2015	10.1091/mbc.E14-07-1250	A mechanism of leading-edge protrusion in the absence of Arp2/3 complex
2015	Rotty et al, 2015	10.1016/j.devcel.2014.10.026	Profilin-1 Serves as a Gatekeeper for Actin Assembly by Arp2/3-Dependent and -Independent Pathways
2015	Phng et al, 2015	10.1016/j.devcel.2014.11.017	Formin-Mediated Actin Polymerization at Endothelial Junctions Is Required for Vessel Lumen Formation and Stabilization
2015	Arden et al, 2015	10.1091/mbc.E14-11-1502	Small-molecule agonists of mammalian Diaphanous-related (mDia) formins reveal an effective glioblastoma anti-invasion strategy
2015	Erfemov et al, 2015	10.1016/j.bbamcr.2015.05.008	Distinct impact of targeted actin cytoskeleton reorganization on mechanical properties of normal and malignant cells
2015	Kim et al, 2015	10.1371/journal.pone.0123438	Small molecule inhibitor of formin homology 2 domains (SMIFH2) reveals the roles of the formin family of proteins in spindle assembly and asymmetric division in mouse oocytes.
2015	Isogai et al, 2015	10.1038/srep09802	SMIFH2 has effects on Formins and p53 that perturb the cell cytoskeleton.
2015	Ramanathan et al, 2015	10.1038/ncb3098	Cdk1-dependent mitotic enrichment of cortical myosin II promotes cell rounding against confinement
2015	Tabdanov, et al, 2015	10.1039/c5ib00032g	Micropatterning of TCR and LFA-1 ligands reveals complementary effects on cytoskeleton mechanics in T cells
2015	Tee et al, 2015	10.1038/ncb3137	Cellular chirality arising from the self-organization of the actin cytoskeleton
2015	Saha et al, 2015	10.1091/mbc.E15-06-0397	Diffusion of GPI-anchored proteins is influenced by the activity of dynamic cortical actin
2015	Wakayama et al, 2015	10.1016/j.devcel.2014.11.024	Cdc42 Mediates Bmp-Induced Sprouting Angiogenesis through Fmnl3-Driven Assembly of Endothelial Filopodia in Zebrafish
2015	Sorce et al, 2015	10.1038/ncomms9872	Mitotic cells contract actomyosin cortex and generate pressure to round against or escape epithelial confinement

2014	Wong et al, 2014	10.1073/pnas.1412285111	Fibroblasts probe substrate rigidity with filopodia extensions before occupying an area
2014	Avasthi et al, 2014	10.1016/j.cub.2014.07.038	Actin Is Required for IFT Regulation in Chlamydomonas reinhardtii
2014	Guet et al, 2014	10.1016/j.cub.2014.06.048	Mechanical Role of Actin Dynamics in the Rheology of the Golgi Complex and in Golgi-Associated Trafficking Events
2014	Lechuga et al., 2014	10.1091/mbc.e14-03-0815	Loss of γ-cytoplasmic actin triggers myofibroblast transition of human epithelial cells
2014	Kajita et al., 2014	10.1038/ncomms5428	Filamin acts as a key regulator in epithelial defence against transformed cells
2014	Harris et al., 2014	10.1242/jcs.142349	Formation of adherens junctions leads to the emergence of a tissue-level tension in epithelial monolayers
2014	Beckham et al., 2014	10.1371/journal.pone.0100943	Arp2/3 Inhibition Induces Amoeboid-Like Protrusions in MCF10A Epithelial Cells by Reduced Cytoskeletal-Membrane Coupling and Focal Adhesion Assembly
2014	Tien and Chang, 2014	10.1038/onc.2013.241	
2014	Pettee et al., 2014	10.1371/journal.pone.0090371	An mDia2/ROCK Signaling Axis Regulates Invasive Egress from Epithelial Ovarian Cancer Spheroids
2014	Jennings et al., 2014	10.1182/blood-2014-02-557843	RhoA determines disease progression by controlling neutrophil motility and restricting hyperresponsiveness
2013	Nedeva et al, 2013	10.1038/ncomms3165	Synthetic polyamines promote rapid lamellipodial growth by regulating actin dynamics
2013	Ucar et al, 2013	10.1242/jcs.130476	The Mos–MAPK pathway regulates Diaphanous-related formin activity to drive cleavage furrow closure during polar body extrusion in starfish oocytes
2013	Buvall et al., 2013		
2013	Murk et al., 2013	10.1242/jcs.125146	The antagonistic modulation of Arp2/3 activity by N-WASP, WAVE2 and PICK1 defines dynamic changes in astrocyte morphology
2013	Luo et al., 2013	10.1083/jcb.201210123	Analysis of the local organization and dynamics of cellular actin networks
2013	Iskratsch et al., 2013	10.1016/j.devcel.2013.11.003	FHOD1 Is Needed for Directed Forces and Adhesion Maturation during Cell Spreading and Migration
2013	Yu et al., 2013		
2013	Aragona et al., 2013	10.1016/j.cell.2013.07.042	A Mechanical Checkpoint Controls Multicellular Growth through YAP/TAZ Regulation by Actin-Processing Factors
2013	Rao et al., 2013		
2013	Wilson et al., 2013	10.1038/ncomms3896	Mechanisms of leading edge protrusion in interstitial migration
2013	Goldspink et al., 2013	10.1242/jcs.129759	The microtubule end-binding protein EB2 is a central regulator of microtubule reorganisation in apico-basal epithelial differentiation
2013	Fritzsche et al., 2013	10.1091/mbc.e12-06-0485	Analysis of turnover dynamics of the submembranous actin cortex
2013	Sandbo et al., 2013		
2012	Rosero et al., 2012	10.1093/jxb/ers351	AtFH1 formin mutation affects actin filament and microtubule dynamics in Arabidopsis thaliana
2012	Chin et al., 2012	10.1371/journal.pone.0046949	Actin Recruitment to the Chlamydia Inclusion Is Spatiotemporally Regulated by a Mechanism That Requires Host and Bacterial Factors
2012	Miklavc et al., 2012	10.1242/jcs.105262	Actin coating and compression of fused secretory vesicles are essential for surfactant secretion – a role for Rho, formins and myosin II

2012	Oakes et al., 2012		
2012	Wyse et al., 2012	10.1371/journal.pone.0045085	Dia-Interacting Protein (DIP) Imposes Migratory Plasticity in mDia2-Dependent Tumor Cells in Three-Dimensional Matrices
2012	Tang and Brieher, 2012	10.1083/jcb.201103116	α-Actinin-4/FSGS1 is required for Arp2/3-dependent actin assembly at the adherens junction
2011	Li et al., 2011		
2011	Poincloux et al., 2011	10.1073/pnas.1010396108	Contractility of the cell rear drives invasion of breast tumor cells in 3D Matrigel
2009	Rizvi et al., 2009		

Supplementary Table S2. Formin proteins on which SMIFH2 has been shown to inhibit the actin polymerization activity. Official protein names for human formins are indicated, whereas aliases are used for the mouse orthologues (mDia1 = Diap1; mDia2 = Diap3). Note that FH1-FH2-C-term and FH1-FH2 were assayed in [29] and in [28], respectively.

Formin	IC_{50} [Reference]
DIAPH1/mDia1	30 ± 10 [29]/~10 [28]
DIAPH2	6 ± 3 [29]
DIAPH3/mDia2	~10 [28]
INF2	10 ± 5 1 [29]
FMNL3	27 0 ± 1 [29]