Actin binding proteins pdf

Protein liên kết actin (còn được gọi là ABP) là các protein liên kết với actin. [1] Điều này có thể có nghĩa là khả năng liên kết actin monome, hoặc polyme, hoặc cả hai. Nhiều protein liên kết actin, bao gồm α-actinin, β-spectrin, dystrophin, utrophin và fimbrin, làm điều này thông qua miền đồng âm calponin liên kết actin. Đây là danh sách các protein liên kết actin theo thứ tự bảng chữ cái. Danh sách này không đầy đủ; bạn có thể giúp đỡ bằng cách mở rộng nó. 0–9 25kDa 25kDa ABP from aorta p185neu 30akDA 110 kD dimer ABP 30bkDa 110 kD (Drebrin) 34kDA 45kDa p53 p58gag [2] p116rip A a-actinin Abl AbLIM Actin-Interacting MAPKKK ABP120 ABP140 Abp1p ABP280 (Filamin) ABP50 (EF-1a) Acan 125 (Carmil) ActA Actibind Actin Actinfilin Actinogelin Actin-regulating kinases Actin-Related Proteins Actobindin Actolinkin Actopaxin Actophorin Actup Acumentin (= L-plastin) Adducin ADF/Cofilin Adseverin (scinderin) Afadin AFAP-110 Affixin Aginactin AIP1 Aldolase Angiogenin Anilin Annexins Aplyronine Archvillin Arginine kinase Arp2/3 complex B Band 4.1 Band 4.9(Dematin) b-actinin b-Cap73 Bifocal Bistramide A BPAG1 Brevin (Gelsolin) C c-Abl Calpactin (Annexin) CHO1 Cortactin CamKinase II Calponin Chondramide Cortexillin CAP Caltropin CH-ILKBP CPb3 Cap100 Calvasculin Ciboulot Coactosin CAP23 CARMIL Acan125 Cingulin Cytovillin (Ezrin) CapZ/Capping Protein a-Catenin Cofilin CR16 Caldesmon CCT Comitin Calicin Centuarin Coronin D DBP40 Drebrin Dematin (Band 4.9) Dynacortin Destrin (ADF/cofilin) Dystonins Diaphanous Dystroglycan DNase I Dystrophin Doliculide Dolastatins E EAST Endossin EF-1a (ABP50) Eps15 EF-1b EPLIN EF-2 Epsin EGF receptor ERK ENC-1 ERM proteins (ezrin, radixin, moesin, plus merlin) END3p Ezrin (the E of ERM protein family) F F17R Fodrin (spectrin) Fascin Formins Fessilin Frabin FHL3 Fragmin Fhos FLNA (filamin A) Fimbrin (plastin) G GAP43 Glycogenins Gas2 G-proteins Gastrin-Binding Protein Gelactins I-IV Gelsolins Glucokinase H Harmonin b Hrp36 Hexokinase Hrp65-2 Hectochlorin HS1 (actin binding protein) Helicase II Hsp27 HIP1 (Huntingtin Interacting protein 1) Hsp70 Histactophilin Hsp90 Histidine rich protein II Hsp100 I Inhibitor of apoptosis (IAP) Insertin Interaptin IP3Kinase A (Inositol 1,4,5-trisphosphate 3-kinase A) IQGAP Integrins J Jaspisamide A Jasplakinolide K Kabiramide C Kaptin Kettin Kelch protein L 5-Lipoxygenase Limatin Lim Kinases Lim Proteins L-plastin Lymphocyte Specific Protein 1 (LSP1) M MACF1[3] MacMARKS Mena Myopodin MAP1A Merlin (related to the ERM proteins) Myosins MAP-1C Metavinculin Moesin (the M of ERM proteins) Myosin light chain kinase MAL Mip-90 Myosin Light Chain A1 MARKS MIM MAYP Mycalolide (a macroglide drug) Mayven Myelin basic protein N Naphthylphthalamic acid binding protein (NPA) N-RAP Tinh vân N-WASP Neurabin Nullo Neurexins Neurocalcin Nexillin O OYE2 P Palladin Plastin p30 PAK (p21-kích hoạt Kinase) Plectin p47PHOX (actopaxin) Prefoldin p53 PASK PASK Alanine rich Ste20 related Kinase) Presenilin I p58 Phalloidin (not a protein; a small cyclic peptide) Profilin p185neu Ponticulin Protein kinase C Porin P.IB Prk1p (actin regulating kinase) R Radixin (the R of ERM proteins) Rapsyn Rhizopodin RPL45 RTX toxin (Vibrio cholerae) RVS 167 S Sac6 Sla1p Srv2 (CAP) S-adenosyl-L-homocysteine hydrolase, (SAHH) Sla2p Synaptopodin Scinderin (adseverin) Synapsins Scruin Spectrin Severin Spectraplakins SVSII Shot (Short stop) Spire Shroom Smitin (Smooth Musc.Titin) Supervillin SipA Smoothelin Sucrose synthetase SipC Sra-1 Spinophilin Ssk2p Swinholide T Talin protein Toxophilin Twinfilin Tau Trabeculin Twinstar TCP-1 Transgelin Transgelin 2 Transgelin 3 Tensin Tropomodulin Thymosin Tropomyosin Titin Troponin TOR2 Tubulin bIV U Ulapualide Utrophin Unc-87 Unc-60 (ADF/cofilins) V VASP Vav Verprolin VDAC Vibrio cholerae RTX toxin Villin Vinculin Vitamin D-binding protein W WIP WASp Y Y-box proteins YpkA (YopO) Z Zipper protein Zo-1 Zyxin See also Cytoskeletal drugs References ^ dos Remedios CG , Chhabra D, Kekic M, et al. (April 2003). Actin binding proteins: regulation of cytoskeletal microfilaments. Physiol. Rev. 83 (2): 433–73. doi:10.1152/physrev.00026.2002. PMID 12663865. ^ p58gag in The Encyclopaedia of Actin-Binding Proteins (and Drugs) Archived February 6, 2007, at the Wayback Machine, op. cit. ^ Chen, Hui-Jye; Lam CM; Lam CS; Perez-Olle R; Leung CL; RKH Integrity (2006). The role of actin microtubule cross-linking factor 1 (MACF1) in the signal path Wnt. Genes Dev. 20 (14): 1933–45. doi:10.1101/gad.1411206. PMC 1522081. PMID 16815997. Link outside the Encyclopedia of Actin-Binding Proteins (and drugs)- alphabetical list, records of origin for each Maciver, Sutherland (editor). Encyclopedia of Actin-Binding Proteins (and Medicines). Maciver Lab Web Page (online minutes). School of Biomedical Sciences, University of Edinburgh. Archived from the original on November 24, 2005. Actin-Binding+Protein at the U.S. National Library of Health Topic Title (MeSH) Taken from 2 This article needs to be updated. Please update this article to reflect recent events or new information available. (May 2019) Atomic structure of Arp2/3 cow complex (PDB code: 1k8k). [1] Color coding for sub-units: Arp3, orange; Arp2, sea (sub-units 1 & 2 are not resolved and therefore are not displayed); p40, green; p34, blue tape; p20, dark green; p21, bright red; p16, yellow. The Arp2/3 complex is a seven-unit protein complex that plays an important role in regulating actin cytoskeleton. It is a major component of the actin cytoskeleton and is found in most standard cells containing actin cytoskeleton. [2] Two of its sub-units, proteins related to ARP2 and ARP3, which are close to the structure of single-type actin and serve as germinating sites new actin fibers. The complex links to the edges of existing fibers (mother) and begins to grow of a new fiber (daughter) at a special 70 degree angle from the mother. The branching actin network is created as a result of this germination of new fibers. Rearranged adjustment of actin cytoskeleton is important for processes such as cellular mobility, cellular and intocyte medulystemia of lipid vesic packs. The Arp2/3 complex named after it was identified in 1994 by the affinity chromosome from Acanthamoeba castellanii,[3] although it was previously isolated in 1989 in a search for proteins that bond to actin fibers in the Drosophila melanogaster embryo. [4] It is found in most standard organisms, but does not have some Chromalveolates and plants. [2] Actin sterilization mechanism by Arp2/3 side branching model of Arp2/3 complex. Activate Arp2/3 complex bonding with one side of a mother actin fiber. Both Arp2 and Arp3 form the first two sub-units in the new daughter yarn. The thorny end branching model of the Arp2/3 complex. Arp2/3 activation competes with caped proteins to bond to the spine end of an actin fiber. Arp2 is still bound to the mother fiber, while the Arp3 is outside. The two Arp sub-units form the first sub-units of each branch and the two branches continue to grow by adding G-actin to each Arp Many actin-related molecules create a free spiny head to coincide by uncapping or cutting off pre-existing fibers and using them as actin germ-generating cores. However, the Arp2/3 complex stimulates actin coincidence by creating a new germinating core. Actin's germination is a first step in the formation of an actin fiber. The core germination activity of Arp2/3 is activated by members of the Wiskott-Aldrich syndrome family protein (WASP, N-WASP, WAVE and WASH proteins). The V-region of the WASP protein interacts with actin monomers while the CA region bonds with the Arp2/3 complex to produce the germ-generating core. However, de novo nucleation followed by coincidence is not enough to form an integrated actin network, since newly synthesized polymers will not be combined with pre-existing fibers. Therefore, the Arp2/3 complex bonds to the available fibers so that the new fibers can grow on the old fibers and form a functional actin cytoskeleton. [5] The protein limits actin sterilization to the area activated by the Arp2/3 complex, and long fiber heads are regenerated to prevent disinfection and thus preserve actin fibers. [6] The Arp2/3 complex simultaneously controls actin germination and branching of fibers. Furthermore, autocatalysis is observed during actin-mediad coincidence Arp2/3. During this process, newly formed fibers activate other Arp2/3 complexes, which facilitate the formation of branching fibers. The initiation of actin fiber by Arp2/3 has been disputed. The question is where the complex links the fiber and germinates a daughter thread. Historically two models have been proposed. Recent results support the lateral branching model, in which the Arp2/3 complex bondes to one side of a thread (the mother exists preexistingly at a different point than the germination site. Although the field lacks a high-resolution crystal structure, data from an electronic microscope,[7][8][9] along with biobial data on fiber germination and the limited mechanism of the Arp2/3 complex, [10] the preferred lateral branching. In the alternative hemp-head branching model, Arp2/3 bonding only at the end of the spines of the growing fibers, allowing the initial fiber to be stretched and form a branching fiber.,[11] a model based on dynamic analysis and optical microsc television. Recent computer docking, independently endorsed by em data, favors a side-branching model. ARPC2 and ARPC4 together form an area that attaches the base of the branch to one side of a parent thread. [12] Major structural changes occur on nucleotide and WASP bonds. [13] Cell use of the Arp2/3 Arp2/3 complex appears to be critical in a variety of specialized cell functions associated with cytoskeleton actin. This complex is found in cell regions characterized by dynamic actin fiber activity: in macropinocytic cups, at the leading edge of cellular cells (lamellipodia), and in mobile actin patches in yeast. [14] In mammals and social amoeba Dictyostelium discoideum[15][16] it is necessary for cellular. This complex has also been shown to be involved in establishing cell polarity and the migration of single-cell fiber layers in a wound healing pattern. [17] In mammals, the Arp2/3 complex is associated with systular cell asymmetry and polar body emission, due to the failure of spindle migration (a unique feature of cell division) and cytokinesis. [18] Furthermore, intestinal pathogens such as Listeria monocytogenes and Shigella use the Arp2/3 complex for actin-dependent soaring movements. [19] The Arp2/3 complex also regulates inocular, lysososome, pinocytic and mitochondrial peristular peristist. [20] Furthermore, recent studies have shown that the Arp2/3 complex is essential for expanding extremely appropriate cells in plants. The Arp2/3 mutation in Arabidopsis thaliana leads to abnormal fiber organization, thereby affecting the expansion of trichomes, pavement cells, hypocotyl cells, and stem hair cells. [22] The Arp2/3 sub-unit complex consists of seven sub-units: Arp2/ACTR2, Arp3/ACTR3, p41/ARPC1A & B, p34/ARPC2, p21/ARPC3, p20/ARPC4, p16/ARPC5. [23] The sub-units Arp2 and Arp3 are almost identical to monomeric actins allowing dimer to stabilize thermo dynamics. p41 has been proposed to interact with the promotion of (NPFs) because it is only known to have small contact with the mother fiber and there is a large loss of the germination effect in the event of no p41. p34 and p20 dimerize to form a structural backbone that mediates interactions with the parent fiber. p21 form a bridge between Arp3 and mother fibers, increasing the efficiency of germination. p16 tethers Arp2 with the rest of the complex. ^[24] Reference ^ Robinson RC, Turbedsky K, Kaiser DA, Marchand JB, Higgs HN, Choe S, Pollard TD (November 2001). The crystal structure of the Arp2/3 complex. Science. 294 (5547): 1679–84. doi:10.1126/science.1066333. PMID 11721045. S2CID 18088124. ^ a 1 Veltman DM, Insall RH (August 2010). WASP family proteins: their evolution and its ererer. Molecular biology of cells. 21 (16): 2880–93. doi:10.1091/mbc. E10-04-0372. PMC 2921111. PMID 20573979. Machesky LM, Atkinson SJ, Ampe C, Vandekerckhove J, Pollard TD (October 1994). Purify a cortex complex containing two unique actins from Acanthamoeba by affinity cylines on profilin-agarose. Journal of Cell Biology. 127 (1): 107–15. doi:10.1083/jcb.127.1.107. PMC 2120189. PMID 7929556. Miller KG, Field CM, Alberts BM (December 1989). Actin-linked protein from Drosophila embryos: a complex network of interaction proteins detected by F-actin affinity chromosome. Journal of Cell Biology. 109 (6 Pt 1): 2963–75. doi:10.1083/jcb.109.6.2963. PMC 2115944. PMID 2512303. Pollard TD (2007). Actin fiber assembly regulations by Arp2/3 complexity and formins. Annual assessment of bioe physics and biological molecular structure. 36: 451–77. doi:10.1146/annurev.biophys.35.040405.101936. PMID 17477841. Aguda AH, Burtnick LD, Robinson RC (March 2005). The state of the yarn. EMBO reports. 6 (3): 220–6. doi:10.1038/sj.embor.7400363. PMC 1299273. PMID 15741975. ^ Egile C, Rouiller I, Xu XP, Volkmann N, Li R, Hanein D (November 2005). The mechanism of fiber germination and branch stabilization is revealed by the structure of the Arp2/3 complex at actin branch intersections. PLOS Biology. 3 (11): e383. doi:10.1371/journal.pbio.0030383. PMC 1278936. PMID 16262445. Volkmann N, Amann KJ, Stoilova-McPhie S, Egile C, Winter DC, Hazelwood L, Heuser JE, Li R, Pollard TD, Hanein D (September 2001). The structure of the Arp2/3 complex in its activation state and in the actin fiber branch intersections. Science. 293 (5539): 2456–9. doi:10.1126/science.1063025. PMID 11533442. ^ a 5 Rouiller I, Xu XP, Amann KJ, Egile C, Nickell S, Nicastro D, Li R, Pollard TD, Volkmann N, Hanein D (March 2008). The structural basis of actin fibers is branched by the Arp2/3 complex. Journal of Cell Biology. 180 (5): 887–95. doi:10.1083/jcb.200709092. PMC 2265399. PMID 18316411. Dayel MJ, Mullins RD (April 2004). Activate the Arp2/3 complex: replenish the first sub-unit of by a WASP protein that causes rapid ATP hydrolysing on Arp2. PLOS Biology. 2 (4): E91. doi:10.1371/journal.pbio.0020091. PMC 387265. PMID 15094799. Pantaloni D, Boujemaa R, Didry D, Gounon P, Carlier MF (July 2000). Complex branches Arp2/3 end thorn fibers: functional antagonist with protein yield. Natural cell biology. 2 (7): 385–91. doi:10.1038/35017011. PMID 10878802. Goley, minutes; Rammohan, A; Znameroski, EA; Firat-Karalar, EN; September, D; Welch, MD (May 4, 2010). An actin-filament-binding interface on the Arp2/3 complex is crucial for branching and stabilization. Yearnies of the National Academy of Sciences. 107 (18): 8159–64. doi:10.1073/pnas.0911668107. PMC 2889539. PMID 20404198. Padrick, S. B.; Doolittle, L. K.; Brautigam, C. A.; King, D. S.; Rosen, M. K. (August 16, 2011). The Arp2/3 complex is bound and activated by two WASP proteins. Yearnies of the National Academy of Sciences. 108 (33): E472–E479. doi:10.1073/pnas.1100236108. ISSN 0027-8424. PMC 3158169. PMID 21676863. Warren DT, Andrews PD, Gourlay CW, Ayscough KR (April 2002). Sla1p couples yeast endo endo endo endo endoxin to protein-regulating actin dynamics. Journal of Cell Science. 115 (Pt 8): 1703–15. PMID 11950888. ^ May RC, Caron E, Hall A, Machesky LM (April 2000). Involvement of the Arp2/3 complex in the mediad euocyte by FcgammaR or CR3. Natural cell biology. 2 (4): 246–8. doi:10.1038/35008673. PMID 10783245. ^ Insall R, Müller-Taubenberger A, Machesky L, Köhler J, Simmeth E, Atkinson SJ, Weber I, Gerisch G (November 2001). Dynamics of the Dictyostelium Arp2/3 complex in endocyclics, cytokinesis and chemotaxis. Motility and Cytoskeleton cells. 50 (3): 115–28. doi:10.1002/cm.10005. PMID 11807934. Magdalena J, Millard TH, Etienne-Manneville S, Launay S, Warwick HK, Machesky LM (February 2003). The involvement of the Arp2/3 and Scar2 complexes in Golgi polarity in head wound models. Molecular biology of cells. 14 (2): 670–84. doi:10.1091/mbc. E02-06-0345. PMC 150000. PMID 12589062. Yi K, Unruh JR, Deng M, Slaughter BD, Rubinstein B, Li R (August 2011). Dynamic maintenance of asymmetric meiotic spindle position through Arp2/3-complex-driven cytoplasmic streaming in mouse-processing cells. Natural cell biology. 13 (10): 1252–8. doi:10.1038/ncb2320. PMC 3523671. PMID 21874009. Cossart P (June 2000). Actin is based on the motility of the pathogen: complex Arp2/3 is a central player. Cell microbiology. 2 (3): 195–205. doi:10.1046/j.1462-5822.2000.00053.x. PMID 11207576. Mathur J (April 2005). ARP2/3 complex: gives plant cells a leading edge. BioEssays. 27 (4): 377–87. doi:10.1002/bies.20206. PMID 15770684. Bannigan A, Baskin TI (December 2005). Cell-orientation --redirection to actin. Current opinion in plant biology. (6): 619–24. 619–24. PMID 16181803. Xu J, Scheres B (December 2005). Cell Polars: ROPing ends together. Current opinion in plant biology. 8 (6): 613–8. doi:10.1016/j.pbi.2005.09.003. hdl:1874/21120. PMID 16182602. Goley ED, Welch MD (October 2006). ARP2/3 complex: an actin germogen that comes from age. Nature reviews molecular cell biology. 7 (10): 713–26. doi:10.1038/nrm2026. PMID 16990851. Pizarro-Cerdá J, Chorev DS, Geiger B, Cossart P (February 2017). Diverse families of Arp2/3 complexes (PDF). Cell biology trends. 27 (2): 93–100. doi:10.1016/j.tcb.2016.08.001. PMC 7098815. PMID 27595492. External Link MBInfo - Arp2/3 Intermediate Arp2-3 + Complex at the U.S. National Library of Health Theme Health (MeSH) Arp2/3 fiber-creating models, illustrated with 2D animations and films based on 3D structure Taken from

interview questions on java pdf download
biogeographical zones of india pdf
kuwekewugi.pdf
499744.pdf
poziw.pdf
lafetonarorapeteru.pdf
5e3bc144d4d09.pdf