**BRIEF CURRICULUM VITAE**

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| **FULL NAME: Dr. Andras Nagy** | |
| POSITION TITLE: Senior Investigator | |
| INSTITUTION: Mount Sinai Hospital, Lunenfeld-Tanenbaum Research Institute | |
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| **ACADEMIC BACKGROUND** | | | |
| *Degree Type* | *MM/YY* | *Discipline/Field/Specialty* | *Institution & Country* |
| B.A. (M.A.) | 1974 | Mathematics | Lorand Eötvös University, Budapest, Hungary |
| Ph.D. | 1979 | Genetics | Lorand Eötvös University, Budapest, Hungary |

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| **WORK EXPERIENCE** | | | |
| *Position, Organization* | *Department/Division* | *Start Date* | *End Date* |
| Senior Investigator, Mount Sinai Hospital | Lunenfeld-Tanenbaum Research Institute | 1994 | Present |
| Professor, University of Toronto | Obstetrics & Gynaecology | 2013 | Present |
| Professor, Cross-appointment – University of Toronto | Institute of Medical Sciences | 2010 | Present |
| Adjunct Professor, Monash Uiversity, Melbourne, Australia | Australian Regenerative Medicine Institute | 2014 | Present |
| Professor, University of Toronto | Molecular Genetics | 2000 | 2012 |
| Visiting Professor, University of Helsinki | Faculty of Medicine | 2005 | 2009 |
| Associate Professor, University of Toronto | Molecular Genetics | 1999 | 2000 |
| Supervisor, Squibb Transgenic ES facility, Mount Sinai Hospital | Samuel Lunenfeld Research Institute | 1992 | 2000 |
| Visiting Professor, Lorand Eötvös University | Biochemistry | 1996 | 1998 |
| Professor, Lorand Eötvös University | Biochemistry | 1991 | 1996 |
| Visiting Scientist, Mount Sinai Hospital | Samuel Lunenfeld Research Institute | 1989 | 1994 |
| Associate Professor, Lorand Eötvös University | Behaviour Genetics | 1984 | 1991 |
| Assistant Professor, Lorand Eötvös University | Behaviour Genetics | 1982 | 1984 |
| Postdoctoral Fellow, Center for Neurochemistry, NYC |  | 1980 | 1982 |
| Research Fellow | Behaviour Genetics | 1974 | 1979 |

**Personal Statement**

My laboratory has been focusing on research associated with stem cells, developmental genetics, cancer and disease mechanisms and modelling. Historically, our primary tool of interrogations was genetics: precisely modification of mouse and human genes/genome. In the 90’s we first earned international recognition through developing and providing powerful tools for the research community, focusing on functional genetics, developmental and disease modelling of the mouse. This recognition led to the invitation to write a comprehensive reference and protocol collection (Manipulating the Mouse Embryo: A laboratory manual, 3rd and 4th edition, Cold Spring Harbor Laboratory Press, 2002 and 2013), which is considered “the Bible” of the experimental developmental genetics of the mouse.

In 1995-96, we published (Nature, currently 2459 citations) the embryonic lethal haploinsufficient phenotype of Vascular Endothelial Growth Factor (VEGF) deficiency of the mouse. This finding became seminal for research focusing on blood vessel development connected diseases, including cancer and blindness. Since this publication, my laboratory has been intensively studying the multifaceted role of VEGF in cancer and in normal physiological processes.

The second current focus of my laboratory is stem cell biology, which is now connecting to our cancer research. In 2008 we successfully joined the paradigm-shifting field of induced pluripotent stem (iPS) cells. We were the first demonstrating non-viral and transgene free derivation of human iPS cells using the *piggyBac* transposon system (Nature, 2009, currently 709 citations). This finding significantly decreased the safety concerns of the planned iPS cell-based therapies. Somewhat ironically, however, in 2011 we discovered the “Dark Side” of inducing pluripotency in differentiated somatic cells. We showed that the process of reprogramming to stem cells is associated with genome damage, in particular de novo generated copy number variations (Nature, 328 citations in 3 years) and point mutations. This finding brought back the safety concerns of future cell therapies based on iPS cells that have been daring us to find solutions for fail-safe cell therapies.

Our activities cover a broad area of expertise and experience. We always remained in and developed the front line of genome modifications and experimental embryology technologies, including homologous recombination based gene targeting, conditional mutagenesis with Cre recombinase, tetraploid embryo complementation assay (which became the gold standard of testing pluripotency of mouse ES and iPS cells). We successfully applied these tools for analyzing the function of genes with critical importance in development and diseases, such as Vegf, Vegf isoforms, N-myc, Pdgfc, Angptl4, Rtel1 and Nestin. The analysis of the phenotypes allowed developing state-of-art cell/tissue culture expertise, cell biology and imaging methods. Furthermore, in 2011, I spent a Sabbatical leave to study genome and epigenome bioinformatics. This new area recently added to the lab’ arsenal and it is now allowing us deep characterization of the genetic and epigenetic events underlying cell state change, including the reprogramming process from somatic cells to pluripotency and acquisition of tumourigenic and metastatic phenotypes of normal cells leading to cancer.

The unique transposon-based reprogramming system developed in the lab allowed us to bring together and spearhead an international consortium including Australians, Korean, Dutch and Canadian laboratories for a single aim; to characterize at daily resolution the epigenetic changes associated with the process of reprogramming at the level of multiple omics; chromatin marks, genome wide CpG methylation, transcriptome (miRNA, mRNA and lncRNA), global proteome and cell surface proteome. This large international effort recently reached fruition by publication of two Articles in nature and three in Nature Communications.

**Service**

**Ad hoc reviewer for Journals:** Nature, Cell, Cell Stem Cells, Stem Cell Reports, Nature Cell Biology, Nature Communications, Nature Methods, Proc. Natl. Acad. Sci. (PNAS), FEBS Letters, Journal of Clinical Investigations, Development and others.

**Committee Member**

2012-present: Scientific Advisory Committee for Stem Cell Australia

2013-present: Scientific Advisory Board for Jackson Laboratory

**Honours & Awards**

1996-2001 Medical Research Council of Canada/Pharmaceutical Manufacturers Association of Canada-Scientist Award (in partnership with Bristol-Myers Squibb)

2002 Lloyd S.D. Fogler, QC Award for Research of Exellence

2002-2007 Canadian Institute of Health Research-Senior Scientist Award

2005 The Karen McGibbon Award of Excellence, Mount Sinai Hospital

2005 genOway Prize for Transgene Technologies

2007-2014 Canada Research Chair, Tier I

2015-2021 Canada Research Chair, Tier I

2010 Incheon Award from the Korean Society for Biochemistry and Molecular Biology

2012 A. Ross McIntyre Award, University of Nebraska Medical Center

2012 Honorary Faculty, Victor Chang Cardiac Research Institute

2014 Fellowship to the Royal Society of Canada – Life Science Division of the Academy of Science

**Selected Research / Technology Development Contributions over the past five years**

**Selected peer reviewed primary articles; 2009-present (lifetime total of 246):**

**h-index = 70; cited 22,934 times as December 24, 2014**

1. Benevento, M., Tonge, P.D., Puri, M.C., Hussein, S.M.I., Cloonan, N., Wood, D.L., Grimmond, S.M., **Nagy, A.,** Munoz, J., and Heck, A.J.R. (2014). Proteome adaptation in cell reprogramming proceeds via distinct transcriptional networks. Nat Commun 5, 5613.
2. Clancy, J.L., Patel, H.R., Hussein, S.M.I., Tonge, P.D., Cloonan, N., Corso, A.J., Li, M., Lee, D.S., Shin, J.Y., Wong, J.J.L, Bailey, C.G ., Benevento, M., Munoz, J., Chuah, A., Wood, D., Rasko, J.E.J., Heck, A.J.R., Grimmond, S.M., Rogers, I.M., Seo, J.-S. and Wells, C.A., Puri, M.C., **Nagy, A.** and Preiss, T. (2014). Small RNA changes en route to distinct cellular states of induced pluripotency. Nat Commun 5, 5522.
3. Lee, D.S., Shin, J.Y., Tonge, P.D., Puri, M.C., Lee, S., Park, H., Lee, W.-C., Hussein, S.M.I., Bleazard, T., Yun, J.-Y., Kim, J., Li, M., Cloonan, N., Wood, D., Clancy, J.L., Mosbergen, R., Yi, J.-H., Yang, K.-S., Kim, H., Rhee, H., Wells, C.A., Preiss, T., Grimmond, S.M., Rogers, I.M., **Nagy, A.** and Seo, Y.-S. (2014). An epigenomic roadmap to induced pluripotency reveals DNA methylation as a reprogramming modulator. Nat Commun 5, 5619.
4. Hussein, S.M.I., Puri, M.C., Tonge, P.D., Benevento, M., Corso, A.J., Clancy, J.L., Mosbergen, R., Li, M., Lee, D.S., Cloonan, N Wood, D.L.A., Munoz, J., Middleton, R., Korn, O., Patel, H.R., White, C.A., Shin, J.Y., Gauthier, M.E., Cao, K-A.L.,Kim, J.-I., Mar, J.C., Shakiba, N., Ritchie, W., Rasko, J.E.J., Grimmond, S.M. Zandstra, P.W., Wells, C.A., Preiss, T., Seo, J.-S., Heck, A.J.R., Rogers, I.M and **Nagy, A.** (2014). Genome-wide characterization of the routes to pluripotency. Nature 516, 198–206.
5. Tonge, P.D., Corso, A.J., Monetti, C., Hussein, S.M.I., Puri, M.C., Michael, I.P., Li, M., Lee, D.S., Mar, J.C., Cloonan, N., Wood, D.L., Gauthier, M.E., Korn, O., Clancy J.L., and Preiss, T., Grimmond, S.M., Shin, J.Y., Seo, J.-S., Wells, C.A., Rogers, I.M. and **Nagy, A.** (2014). Divergent reprogramming routes lead to alternative stem-cell states. Nature 516, 192–197.
6. Li, H., Qu, D., McDonald, A., Isaac, S.M., Whiteley, K.J., Sung, H.-K., **Nagy, A.**, and Adamson, S.L. (2014). Trophoblast-specific reduction of VEGFA alters placental gene expression and maternal cardiovascular function in mice. Biol. Reprod. 91, 87.
7. Martinez-Fernandez, A., Nelson, T.J., Reyes, S., Alekseev, A.E., Secreto, F., Perez-Terzic, C., Beraldi, R., Sung, H.-K., **Nagy, A.**, and Terzic, A. (2014). iPS Cell-Derived Cardiogenicity is Hindered by Sustained Integration of Reprogramming Transgenes. Circ Cardiovasc Genet.
8. Onishi, K., Tonge, P.D., **Nagy, A**., and Zandstra, P.W. (2014). Local BMP-SMAD1 Signaling Increases LIF Receptor-Dependent STAT3 Responsiveness and Primed-to-Naive Mouse Pluripotent Stem Cell Conversion Frequency. Stem Cell Reports 1–14.
9. Michael IP, Westenskow PD, Hacibekiroglu S, Cohen Greenwald A, Ballios BG, Kurihara T, Li Z, Warren CM, Zhang P, Aguilar E, Donaldson L, Marchetti V, Baba T, Hussein SM, Sung HK, Iruela-Arispe ML, Rini JM, van der Kooy D, Friedlander M, **Nagy A.\*** Local acting Sticky-trap inhibits vascular endothelial growth factor dependent pathological angiogenesis in the eye. [EMBO Mol Med.](http://www.ncbi.nlm.nih.gov/pubmed/?term=PMID%3A+24705878) 2014 May 1;6(5):604-23.
10. Harris MG, Hulseberg P, Ling C, Karman J, Clarkson BD, Harding JS, Zhang M, Sandor A, Christensen K, **Nagy A**, Sandor M, Fabry Z. Immune privilege of the CNS is not the consequence of limited antigen sampling. [Sci Rep.](http://www.ncbi.nlm.nih.gov/pubmed/?term=PMID%3A+24651727) 2014 Mar 21;4:4422.
11. Smemo S, Tena JJ, Kim KH, Gamazon ER, Sakabe NJ, Gómez-Marín C, Aneas I, Credidio FL, Sobreira DR, Wasserman NF, Lee JH, Puviindran V, Tam D, Shen M, Son JE, Vakili NA, Sung HK, Naranjo S, Acemel RD, Manzanares M, **Nagy A**, Cox NJ, Hui CC, Gomez-Skarmeta JL, Nóbrega MA. Obesity-associated variants within FTO form long-range functional connections with IRX3. [Nature.](http://www.ncbi.nlm.nih.gov/pubmed/?term=24646999) 2014 Mar 20;507(7492):371-5.
12. Kevin Huang, Yin Shen, Zhigang Xue, Marina Bibikova, Craig April, Zhenshan Liu, Linzhao Cheng, **Andras Nagy**, Matteo Pellegrini, Jian-Bing Fan, Guoping Fan. A Panel of CpG Methylation Sites Distinguishes Human Embryonic Stem cells and Induced Pluripotent Stem Cells. [Stem Cell Reports.](http://www.ncbi.nlm.nih.gov/pubmed/?term=A+Panel+of+CpG+Methylation+Sites+Distinguishes+Human+Embryonic+Stem+cells+and+Induced+Pluripotent+Stem+Cells) 2013 Dec 26;2(1):36-43.
13. Choi YS, Zhang Y, Xu M, Yang Y, Ito M, Peng T, Cui Z, **Nagy A**, Hadjantonakis AK, Lang RA, Cotsarelis G, Andl T, Morrisey EE, Millar SE. Distinct Functions for Wnt/β-Catenin in Hair Follicle Stem Cell Proliferation and Survival and Interfollicular Epidermal Homeostasis. [Cell Stem Cell.](http://www.ncbi.nlm.nih.gov/pubmed/?term=PMID%3A+24315444) 2013 Dec 5;13(6):720-33.
14. Behringer R., Gertsensten M., Vintersten K. and **Nagy A.**\* (2013) Manipulating the Mouse Embryo; A Laboratory manual. 4rd edition, Cold Spring Harbor Press, Cold Spring Harbor, New York
15. Brian DeVeale, Irina Brokhman, Paria Mohseni, Tomas Babak, Charles Yoon, Anthony Lin, Kento Onishi, Alexey Tomilin, Larysa Pevny, Peter W. Zandstra, **Andras Nagy**, Derek van der Kooy. Oct4 Is Required ∼E7.5 for Proliferation in the Primitive Streak. [PLoS Genet.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Oct4+Is+Required+%E2%88%BCE7.5+for+Proliferation+in+the+Primitive+Streak.) 2013 Nov;9(11):e1003957.
16. Westenskow PD, Kurihara T, Aguilar E, Scheppke EL, Moreno SK, Wittgrove C, Marchetti V, Michael IP, Anand S, **Nagy A**, Cheresh D, Friedlander M. Ras pathway inhibition prevents neovascularization by repressing endothelial cell sprouting. [J Clin Invest.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Ras+pathway+inhibition+prevents+neovascularization+by+repressing+endothelial+cell+sprouting.) 2013 Nov 1;123(11):4900-8.
17. Muñoz DM, Singh S, Tung T, Agnihotri S, **Nagy A,** Guha A, Zadeh G, Hawkins C. Differential transformation capacity of neuro-glial progenitors during development. [Proc Natl Acad Sci U S A.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Differential+transformation+capacity+of+neuro-glial+progenitors+during+development) 2013 Aug 27;110(35):14378-83.
18. Kim M, Ju Park H, Seol JW, Jang JY, Cho YS, Kim KR, Choi Y, Lydon JP, Demayo FJ, Shibuya M, Ferrara N, Sung HK, **Nagy A,** Alitalo K, Koh GY. VEGF-A regulated by progesterone governs uterine angiogenesis and vascular remodeling during pregnancy. [EMBO Mol Med.](http://www.ncbi.nlm.nih.gov/pubmed/?term=VEGF-A+regulated+by+progesterone+governs+uterine+angiogenesis+and+vascular+remodeling+during+pregnancy.) 2013 Sep;5(9):1415-30.
19. Han H, Irimia M, Ross PJ, Sung HK, Alipanahi B, David L, Golipour A, Gabut M, Michael IP, Nachman EN, Wang E, Trcka D, Thompson T, O'Hanlon D, Slobodeniuc V, Barbosa-Morais NL, Burge CB, Moffat J, Frey BJ, **Nagy A**, Ellis J, Wrana JL, Blencowe BJ. MBNL proteins repress ES-cell-specific alternative splicing and reprogramming. [Nature.](http://www.ncbi.nlm.nih.gov/pubmed/?term=MBNL+proteins+repress+ES-cell-specific+alternative+splicing+and+reprogramming) 2013 Jun 13;498(7453):241-5.
20. Li Z, Michael IP, Zhou D, **Nagy A\*,** Rini JM. Simple piggyBac transposon-based mammalian cell expression system for inducible protein production. [Proc Natl Acad Sci U S A.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Simple+piggyBac+transposon-based+mammalian+cell+expression+system+for+inducible+protein+production) 2013 Mar 26;110(13):5004-9.
21. Lieven Haenebalcke, Steven Goossens, Pieterjan Dierickx, Sonia Bartunkova, Jinke D’Hont, Katharina Haigh, Tino Hochepied, Dagmar Wirth, **Andras Nagy**, Jody J. Haigh. The ROSA26-iPSC Mouse: A Conditional, Inducible, and Exchangeable Resource for Studying Cellular (De)Differentiation. [Cell Rep.](http://www.ncbi.nlm.nih.gov/pubmed/?term=The+ROSA26-iPSC+Mouse%3A+A+Conditional%2C+Inducible%2C+and+Exchangeable+Resource+for+Studying+Cellular+%28De%29Differentiation) 2013 Feb 21;3(2):335-41.
22. Sung HK, Doh KO, Son JE, Park JG, Bae Y, Choi S, Nelson SML, Cowling R, Nagy K, Michael IP, Koh GY, Adamson SL, Pawson A, **Nagy A.\*** Adipose Vascular Endothelial Growth Factor Regulates Metabolic Homeostasis through Angiogenesis. [Cell Metab.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Adipose+Vascular+Endothelial+Growth+Factor+Regulates+Metabolic+Homeostasis+through+Angiogenesis) 2013 Jan 8;17(1):61-72.
23. Michael IP, Monetti C, Chiu AC, Zhang P, Baba T, Nishino K, Agha-Mohammadi S, Woltjen K, Sung HK, **Nagy A.\*** Highly efficient site-specific transgenesis in cancer cell lines. [Mol Cancer.](http://www.ncbi.nlm.nih.gov/pubmed/23231822) 2012 Dec 11;11:89.
24. Jin J, Sison K, Li C, Tian R, Wnuk M, Sung HK, Jeansson M, Zhang C, Tucholska M, Jones N, Kerjaschki D, Shibuya M, Fantus IG, **Nagy A**, Gerber HP, Ferrara N, Pawson T, Quaggin SE. Soluble FLT1 Binds Lipid Microdomains in Podocytes to Control Cell Morphology and Glomerular Barrier Function. [Cell.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Soluble+FLT1+Binds+Lipid+Microdomains+in+Podocytes+to+Control+Cell+Morphology+and+Glomerular+Barrier+Function) 2012 Oct 12;151(2):384-99.
25. Lee YL, Peng Q, Fong SW, Chen AC, Lee KF, Ng EH, **Nagy A**, Yeung WS. Sirtuin 1 Facilitates Generation of Induced Pluripotent Stem Cells from Mouse Embryonic Fibroblasts through the miR-34a and p53 Pathways. [PLoS One.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Sirtuin+1+Facilitates+Generation+of+Induced+Pluripotent+Stem+Cells+from+Mouse+Embryonic+Fibroblasts+through+the+miR-34a+and+p53+Pathways) 2012;7(9):e45633.
26. Onishi K, Tonge PD, **Nagy A**, Zandstra PW. Microenvironment-mediated reversion of epiblast stem cells by reactivation of repressed JAK-STAT signaling. [Integr Biol (Camb).](http://www.ncbi.nlm.nih.gov/pubmed/?term=Microenvironment-mediated+reversion+of+epiblast+stem+cells+by+reactivation+of+repressed+JAK-STAT+signaling.) 2012 Nov;4(11):1367-76.
27. Salewski RP, Buttigieg J, Mitchell RA, van der Kooy D, **Nagy A**, Fehlings MG. The generation of definitive neural stem cells from piggyBac transposon induced pluripotent stem cells can be enhanced by induction of the NOTCH signalling pathway. [Stem Cells Dev.](http://www.ncbi.nlm.nih.gov/pubmed/?term=The+generation+of+definitive+neural+stem+cells+from+piggyBac+transposon+induced+pluripotent+stem+cells+can+be+enhanced+by+induction+of+the+NOTCH+signalling+pathway) 2013 Feb 1;22(3):383-96.
28. Willenborg S, Lucas T, van Loo G, Knipper JA, Krieg T, Haase I, Brachvogel B, Hammerschmidt M, **Nagy A**, Ferrara N, Pasparakis M, Eming SA. CCR2 recruits an inflammatory macrophage subpopulation critical for angiogenesis in tissue repair. [Blood.](http://www.ncbi.nlm.nih.gov/pubmed/?term=CCR2+recruits+an+inflammatory+macrophage+subpopulation+critical+for+angiogenesis+in+tissue+repair) 2012 Jul 19;120(3):613-25.
29. Fluri DA, Tonge PD, Song H, Baptista RP, Shakiba N, Shukla S, Clarke G, **Nagy A**, Zandstra PW. Derivation, expansion and differentiation of induced pluripotent stem cells in continuous suspension cultures. [Nat Methods.](http://www.ncbi.nlm.nih.gov/pubmed/?term=.+++Derivation%2C+expansion+and+differentiation+of+induced+pluripotent+stem+cells+in+continuous+suspension+cultures.) 2012 Mar 25;9(5):509-16.
30. Teta M, Choi YS, Okegbe T, Wong G, Tam OH, Chong MM, Seykora JT, **Nagy A**, Littman DR, Andl T, Millar SE. Inducible deletion of epidermal Dicer and Drosha reveals multiple functions for miRNAs in postnatal skin. [Development.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Inducible+deletion+of+epidermal+Dicer+and+Drosha+reveals+multiple+functions+for+miRNAs+in+postnatal+skin.+Development.) 2012 Apr;139(8):1405-16.
31. Ji J, Ng SH, Sharma V, Neculai D, Hussein S, Sam M, Trinh Q, Church GM, McPherson JD, **Nagy A**, Batada NN. Elevated Coding Mutation Rate During the Reprogramming of Human Somatic Cells into Induced Pluripotent Stem Cells. [Stem Cells.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Elevated+Coding+Mutation+Rate+During+the+Reprogramming+of+Human+Somatic+Cells+into+Induced+Pluripotent+Stem+Cells.) 2012 Mar;30(3):435-40.
32. Mathieu Gabut, Payman Samavarchi-Tehrani, Xinchen Wang, Valentina Slobodeniuc, Dave O'Hanlon, Hoon-Ki Sung, Manuel Alvarez, Shaheynoor Talukder, Qun Pan, Esteban O. Mazzoni, Stephane Nedelec, Hynek Wichterle, Knut Woltjen, Timothy R. Hughes, Peter W. Zandstra, **Andras Nagy**, Jeffrey L. Wrana, Benjamin J. Blencowe. An Alternative Splicing Switch Regulates Embryonic Stem Cell Pluripotency and Reprogramming. [Cell.](http://www.ncbi.nlm.nih.gov/pubmed/?term=An+Alternative+Splicing+Switch+Regulates+Embryonic+Stem+Cell+Pluripotency+and+Reprogramming.) 2011 Sep 30;147(1):132-46.
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41. Koh YJ, Kim HZ, Hwang SI, Lee JE, Oh N, Jung K, Kim M, Kim KE, Kim H, Lim NK, Jeon CJ, Lee GM, Jeon BH, Nam DH, Sung HK, **Nagy A**, Yoo OJ, Koh GY. Double Antiangiogenic Protein, DAAP, Targeting VEGF-A and Angiopoietins in Tumor Angiogenesis, Metastasis, and Vascular Leakage. [Cancer Cell.](http://www.ncbi.nlm.nih.gov/pubmed/?term=Double+Antiangiogenic+Protein%2C+DAAP%2C+Targeting+VEGF-A+and+Angiopoietins+in+Tumor+Angiogenesis%2C+Metastasis%2C+and+Vascular+Leakage) 2010 Aug 9;18(2):171-84.
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