Niels Behrendt
Research Leader
Finsen Laboratory

Contact Information

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Education, scientific degrees and assessment of scientific qualifications

Nov. 2006	Qualified for full professorship in Molecular Oncology at the University of Copenhagen (positive qualification assessment by international evaluation committee).
Dec. 2004	D.Sc. (Danish dr.scient. degree), the University of Copenhagen, the Faculty of Science, Institute of Molecular Biology.
Dec. 1989	Ph.D., the University of Copenhagen, the Faculty of Science, Central Institute of Molecular Biology.
Feb. 1983	Master´s (Danish cand.scient.) degree in Biochemistry, the University of Copenhagen. Speciality subject: Protein Chemistry.
Jun. 1974	Danish General Certificate, Mathematics/Biology line.

Appointments

From 2011	Section head, the Finsen Laboratory, Rigshospitalet, Copenhagen.
2008 – 2011	Acting head of the Finsen Laboratory, Rigshospitalet, Copenhagen.
1996 – 2011	Principal scientist (Research group leader; tenure position) at the Finsen Laboratory, Rigshospitalet, Copenhagen.
1989 – 1996	Personal postdoc grants from the Danish Cancer Society. Working place: The Finsen Laboratory, Rigshospitalet, Copenhagen.
1987 - 1989	Assistant scientist, the Finsen Laboratory, Rigshospitalet, Copenhagen
1986 - 1987	Assistant scientist, the Laboratory of Tumor Virology, the Fibiger Institute, Copenhagen.
1983 - 1986	Personal grant from the Danish Rheumatism Association (Ph.D. project). Working place: Institute of Biochemical Genetics, the University of Copenhagen.,

Scientific publications (summary)

D.Sc. thesis.

73 articles in international peer reviewed journals.

Editor of 1 book (multiauthored).

7 book chapters.

Total scientific citations: More than 6000
Scientific citations, first-authored publications: More than 1000.
h-index: 37. (Ref. ISI Web of Science)

Oral presentation of research (Selected)

Gordon Research Conferences:

2010	Plasminogen Activation & Extracellular Proteolysis, Ventura, California, Invited speaker
2007	Matrix Metalloproteinases, Il Ciocco, Italy: Invited speaker.

2006	Plasminogen Activation & Extracellular Proteolysis, Ventura, California: Invited speaker and session chairman
2004	Plasminogen Activation & Extracellular Proteolysis, Ventura, California: Invited speaker.

Additional recent conferences:

Jun. 2014	1st Matrix Biology Europe conference, Rotterdam, Holland: Invited speaker
Oct. 2013	International Proteolysis Society – General Meeting, Cape Town, South Africa: Invited speaker
2012	Plasminogen Activation System in Pathology (PASP) Workshop, Wollongong, Australia: Invited keynote speaker
	Speaker and session chairman at several additional international conferences
	Talks in the Danish Biochemical Society and the Danish Biological Society
Feb. 2008	Elected conference co-chair of the Gordon Research Conference on Plasminogen Activation & Extracellular Proteolysis, Ventura, California

Research grants

2014-2017	3-year grant from the Danish Medical Research Council, granted for 2014-2017, d.kr. 2,568.960.
2015	1-year grant from the Danish Cancer Society, granted for 2015, d.kr. 351,161
2013-2014	2-year grant from the Novo Nordisk Foundation, granted for 2013-2014, d.kr. 800,000.
2013-2014	2-year grant from the Lundbeck Foundation, granted for 2013-2014, d.kr. 634,600.
2013	Grant from the “Fonden til Fremme af Eksperimentel cancerforskning”, 2013, d.kr. 210,000.
2012	1-year grant from the Novo Nordisk Foundation, granted for 2012, d.kr. 500,000.
2009-2011	3-year grant from the Danish Cancer Society, granted for 2009-2011, d.kr. 1,650,000.
2008-2010	3-year grant from the Danish Medical Research Council, granted for 2008-2010, d.kr. 1,082,550.
2008	1-year grant from the Danish Cancer Society, granted for 2008, d.kr. 500,000
Additional grants	Additional grants (research equipment) from the Danish Cancer Research Foundation, the Novo Nordisk Foundation and the Carlsberg Foundation.

International Collaborations

Participant in grant (“MicroEnviMet”) from the EU FP7 programme; Coordinator: Professor A. Noel, University of Liege, Belgium.
Participant in grant (“Extracellular proteolytic enzymes as therapeutic targets in cancer”) from Danish National Research Foundation; Coordinator: Dr. Peter A. Andreasen, University of Aarhus, Denmark. Grant renewed 2011.

Peer reviewer for scientific journals (since 2000)

EMBO Journal
The Journal of Biological Chemistry
EMBO Reports
Blood
Thrombosis and Haemostasis
European Journal of Haematology
European Journal of Biochemistry
Biological Chemistry
International Journal of Cancer
Breast Cancer Research
Journal of Investigative Dermatology

Issued patents

3 US patents (see list of publications) and parallel versions issued in Europe and other countries.

Teaching and supervision

Pregraduate teaching2006 Instruction/Supervision,
“Human Biology Project 1”, human biology student, the University of Copenhagen. 2008 and 2010 Teaching at the “Course in tumor biology and clinical oncology”. (Until 2010 a combined pregraduate and PhD course; organized by Copenhagen Graduate School of Health Sciences, the Faculty of Health Sciences, the University of Copenhagen).

Postgraduate teaching
1997 Teaching at the course “The haemostatic system”. (PhD course, organized by the Laboratory Center, Rigshospitalet, Copenhagen). 2004 and 2007 Teaching at the course “Cell-Matrix Interactions, Proteolysis, and Invasion”. (PhD course, Danish Research School in Molecular Cancer Research. Organized by the Faculties of Health Sciences at the Universities of Aarhus, Southern Denmark and Copenhagen, the Faculty of Science at University of Aarhus, and research laboratories

at the Danish Cancer Society).

2011 Teaching at the “Course in tumor biology and clinical oncology”. (PhD course, organized by the PhD School / Copenhagen Graduate School of Health Sciences, the Faculty of Health Sciences, the University of Copenhagen).2011 Teaching at the PhD course, “Extracellular Proteolysis in Biology and Disease”, organized by the MoMeD Research School (BRIC), the University of Copenhagen. 2012 Teaching at the PhD course, “Matrix Biology - Cell matrix interplay”, organized by the Graduate School of Health and Medical Sciences, the Faculty of Health Sciences, the University of Copenhagen.2012, 2013 and 2014 Teaching at the “PhD course in tumor biology”, organized by the MoMeD Research School (BRIC) and the Graduate Programme for Oncology og Haematology, the University of Copenhagen.

Function as course organizer 2010 and 2011 Organizer of the “Course in Tumor Biology and Clinical Oncology”, the PhD School / Copenhagen Graduate School of Health Sciences, the Faculty of Health Sciences, the University of Copenhagen.2011 Co-organizer of PhD course, “Extracellular Proteolysis in Biology and Disease”, September 2011. MoMeD Research School (BRIC), the University of Copenhagen.2012, 2013 and 2014 Co-organizer of the “PhD course in tumor biology”, the University of Copenhagen. Responsible for part of course organized by the MoMeD Research School (BRIC).

Research management

Sep. 2011	Section head; Cancer Invasion Project Section, the Finsen Laboratory, Rigshospitalet.
Oct. 2010-June 2011	Completed formal course of leadership, “Leading leaders”, organized by the Danish Capital Region.
Nov. 2008-Mar.2011	Acting head of the Finsen Laboratory, Rigshospitalet.
Since May, 1996	Research group leader at the Finsen Laboratory, Rigshospitalet.

University-related assignments

Evaluation of research institute
2010 Member of expert committee under AERES (L'Agence d'Evaluation de la Recherche et de l'Enseignement Supérieur), the French “Evaluation Agency for Research and Higher Education” (independent government-funded agency). Site visit at Institut de Biologie et Chimie des Protéines (IBCP), Lyon, France, February, 2010

Publications

The recycling collagen receptor uPARAP is a unique mediator of stromal drug delivery to carcinoma cells

Nørregaard, K. S., Larsen, I. M. E., Jürgensen, H. J., Blomquist, M. H., Çakılkaya, P., Metrangolo, V., Perlado, A. M., Krigslund, O., Gårdsvoll, H., Poulsen, T. T., Mumberg, D., Santoni-Rugiu, E., Engelholm, L. H. & Behrendt, N., 16 Jul 2025 , (E-pub ahead of print) In: Molecular Cancer Therapeutics.

A HER2 Specific Nanobody-Drug Conjugate: Site-Selective Bioconjugation and In Vitro Evaluation in Breast Cancer Models

Hansen, A. H., Andersen, K. I. H., Xin, L., Krigslund, O., Behrendt, N., Engelholm, L. H., Bang-Bertelsen, C. H., Schoffelen, S. & Qvortrup, K., 18 Jan 2025, In: Molecules. 30, 2, 391.

Targeting uPAR with an antibody-drug conjugate suppresses tumor growth and reshapes the immune landscape in pancreatic cancer models

Metrangolo, V., Blomquist, M. H., Dutta, A., Gårdsvoll, H., Krigslund, O., Nørregaard, K. S., Jürgensen, H. J., Ploug, M., Flick, M. J., Behrendt, N. & Engelholm, L. H., 17 Jan 2025, In: Science Advances. 11, 3, p. eadq0513 18 p., eadq0513.

BAG2, MAD2L1, and MDK are cancer-driver genes and candidate targets for novel therapies in malignant pleural mesothelioma

Bisceglia, L., Morani, F., Guerrieri, L., Santoni-Rugiu, E., Çakılkaya, P., Scatena, C., Scarpitta, R., Engelholm, L. H., Behrendt, N., Gemignani, F. & Landi, S., Nov 2024, In: Cancer Gene Therapy. 31, 11, p. 1708-1720 13 p.

A proteomics-based survey reveals thrombospondin-4 as a ligand regulated by the mannose receptor in the injured lung

Nørregaard, K. S., Jürgensen, H. J., Heltberg, S. S., Gårdsvoll, H., Bugge, T. H., Schoof, E. M., Engelholm, L. H. & Behrendt, N., May 2024, In: Journal of Biological Chemistry. 300, 5, 107284.

Targeted delivery of alcohol-containing payloads with antibody-drug conjugates

Grier, K. E., Hansen, A. H., Haxvig, C. S., Li, X., Krigslund, O., Behrendt, N., Engelholm, L. H., Rossi, F., Sousa, B. C., Harradence, G. J., Camper, N. & Qvortrup, K. M., 8 Jun 2023, In: Chemical Communications. 59, 47, p. 7240-7242 3 p.

The endocytic receptor uPARAP is a regulator of extracellular thrombospondin-1
Nørregaard, K. S., Jürgensen, H. J., Ingvarsen, S. Z., Heltberg, S. S., Hagensen, C. E., Gårdsvoll, H., Madsen, D. H., Jensen, O. N., Engelholm, L. H. & Behrendt, N., Aug 2022, In: Matrix biology : journal of the International Society for Matrix Biology. 111, p. 307-328 22 p.

Uncovering mediators of collagen degradation in the tumor microenvironment
Thorseth, M.-L., Carretta, M., Jensen, C., Mølgaard, K., Jürgensen, H. J., Engelholm, L. H., Behrendt, N., Willumsen, N. & Madsen, D. H., Feb 2022, In: Matrix Biology Plus. 13, p. 100101 100101.

The collagen receptor uparap in malignant mesothelioma: A potential diagnostic marker and therapeutic target
Çakılkaya, P., Sørensen, R. R., Jürgensen, H. J., Krigslund, O., Gårdsvoll, H., Nielsen, C. F., Santoni-rugiu, E., Behrendt, N. & Engelholm, L. H., 23 Oct 2021, In: International Journal of Molecular Sciences. 22, 21, 11452.

Tumor cell MT1-MMP is dispensable for osteosarcoma tumor growth, bone degradation and lung metastasis
Ingvarsen, S. Z., Gårdsvoll, H., van Putten, S., Nørregaard, K. S., Krigslund, O., Meilstrup, J. A., Tran, C., Jürgensen, H. J. , Melander, M. C., Nielsen, C. H., Kjaer, A., Bugge, T. H., Engelholm, L. H. & Behrendt, N., 5 Nov 2020, In: Scientific Reports. 10, 1, p. 19138 19138.

The collagen receptor uPARAP/Endo180 regulates collectins through unique structural elements in its FNII domain
Nørregaard, K. S., Krigslund, O., Behrendt, N., Engelholm, L. H. & Jürgensen, H. J., 3 Jul 2020, In: Journal of Biological Chemistry. 295, 27, p. 9157-9170 14 p.

TAFI deficiency causes maladaptive vascular remodeling after hemophilic joint bleeding
Wyseure, T., Yang, T., Zhou, J. Y., Cooke, E. J., Wanko, B., Olmer, M., Agashe, R., Morodomi, Y., Behrendt, N., Lotz, M., Morser, J., von Drygalski, A. & Mosnier, L. O., 3 Oct 2019, In: JCI Insight. 4, 19, e128379.

CCL2/MCP-1 signaling drives extracellular matrix turnover by diverse macrophage subsets
Jürgensen, H. J., Silva, L. M., Kriegslund, O., Van Putten, S., Madsen, D. H., Behrendt, N., Engelholm, L. H. & Bugge, T. H., Feb 2019, In: Matrix Biology Plus. 100003.

Immune regulation by fibroblasts in tissue injury depends on uPARAP-mediated uptake of collectins
Jürgensen, H. J., Nørregaard, K. S., Sibree, M. M., Santoni-Rugiu, E., Madsen, D. H., Wassilew, K., Krustrup, D., Garred, P., Bugge, T. H., Engelholm, L. H. & Behrendt, N., 7 Jan 2019, In: Journal of Cell Biology. 218, 1, p. 333-349 17 p.

uPARAP/Endo180 receptor is a gatekeeper of VEGFR-2/VEGFR-3 heterodimerisation during pathological lymphangiogenesis
Durré, T., Morfoisse, F., Erpicum, C., Ebroin, M., Blacher, S., García-Caballero, M., Deroanne, C., Louis, T., Balsat, C., Van de Velde, M., Kaijalainen, S., Kridelka, F., Engelholm, L., Struman, I., Alitalo, K., Behrendt, N., Paupert, J. & Noel, A., 5 Dec 2018, In: Nature Communications. 9, 1, p. 5178

Defective TAFI activation in hemophilia A mice is a major contributor to joint bleeding
Wyseure, T., Cooke, E. J., Declerck, P. J., Behrendt, N., Meijers, J. C. M., von Drygalski, A. & Mosnier, L. O., 11 Oct 2018 , In: Blood. 132, 15, p. 1593-1603

Tumor-Associated Macrophages Derived from Circulating Inflammatory Monocytes Degrade Collagen through Cellular Uptake
Madsen, D. H., Jürgensen, H. J., Siersbæk, M. S., Kuczek, D. E., Grey Cloud, L., Liu, S., Behrendt, N., Grøntved, L., Weigert, R. & Bugge, T. H., 26 Dec 2017, In: Cell Reports. 21, 13, p. 3662-3671 10 p.

The collagen receptor uPARAP/Endo180 as a novel target for antibody-drug conjugate mediated treatment of mesenchymal and leukemic cancers
Nielsen, C. F., van Putten, S. M., Lund, I. K., Melander, M. C., Nørregaard, K. S., Jürgensen, H. J., Reckzeh, K., Christensen, K. R., Ingvarsen, S. Z., Gårdsvoll, H., Jensen, K. E., Hamerlik, P., Engelholm, L. H. & Behrendt, N., 4 Jul 2017, In: Oncotarget. 8, 27, p. 44605-44624 20 p.

Phagocytosis of Collagen Fibrils by Fibroblasts In Vivo is Independent of the uPARAP/Endo180 Receptor
Sprangers, S., Behrendt, N., Engelholm, L., Cao, Y. & Everts, V., 2017, In: Journal of Cellular Biochemistry. 118, 6, p. 1590-1595

Crystal structures of the ligand binding region of uPARAP: effect of calcium ion binding
Yuan, C., Jürgensen, H. J., Engelholm, L. H., Li, R., Liu, M., Jiang, L., Luo, Z., Behrendt, N. & Huang, M., 28 Jul 2016, In: Biochemical Journal. 473, 15, p. 2359-2368

Targeting a novel bone degradation pathway in primary bone cancer by inactivation of the collagen receptor uPARAP/Endo180
Engelholm, L. H., Carlsen Melander, E. M., Hald, A., Persson, M., Madsen, D. H., Jürgensen, H. J., Johansson, K. B. C., Nielsen, C., Nørregaard, K. S., Ingvarsen, S. Z., Kjaer, A., Trovik, C. S., Laerum, O. D., Bugge, T. H., Eide, J. & Behrendt, N., 2016, In: The Journal of pathology. 238, p. 120-133

The collagen receptor uPARAP/Endo180 in tissue degradation and cancer (Review)
Carlsen Melander, E. M., Jürgensen, H. J., Madsen, D. H., Engelholm, L. H. & Behrendt, N., 12 Aug 2015, In: International Journal of Oncology. 47, 4, p. 1177-88

Advances in targeted delivery of small interfering RNA using simple bioconjugates
Nielsen, C., Kjems, J., Sørensen, K. R., Engelholm, L. H. & Behrendt, N., May 2014, In: Expert Opinion on Drug Delivery. 11, 5, p. 791-822 32 p.

Matrix metalloproteinase 2 and membrane-type 1 matrix metalloproteinase co-regulate axonal outgrowth of mouse retinal ganglion cells
Gaublomme, D., Buyens, T., De Groef, L., Stakenborg, M., Janssens, E., Ingvarsen, S., Porse, A., Behrendt, N. & Moons, L., 27 Mar 2014, In: Journal of Neurochemistry. 129, 6, p. 966-79

Complex Determinants in Specific Members of the Mannose Receptor Family Govern Collagen Endocytosis
Jürgensen, H. J., Johansson, K. B. C., Madsen, D. H., Porse, A., Carlsen Melander, E. M., Nielsen, C., Sørensen, K. R., Bugge, T. H., Behrendt, N. & Engelholm, L. H., 14 Mar 2014, In: Journal of Biological Chemistry. p. 7935-7947

A monoclonal antibody interferes with TIMP-2 binding and incapacitates the MMP-2-activating function of multifunctional, pro-tumorigenic MMP-14/MT1-MMP
Shiryaev, S. A., Remacle, A. G., Golubkov, V. S., Ingvarsen, S., Porse, A., Behrendt, N., Cieplak, P. & Strongin, A. Y., 2 Dec 2013, In: Oncogenesis. 2, p. e80

M2-like macrophages are responsible for collagen degradation through a mannose receptor-mediated pathway
Madsen, D. H., Leonard, D., Masedunskas, A., Moyer, A., Jürgensen, H. J., Peters, D. E., Amornphimoltham, P., Selvaraj, A., Yamada, S. S., Brenner, D. A., Burgdorf, S., Engelholm, L. H., Behrendt, N., Holmbeck, K., Weigert, R. & Bugge, T. H., 16 Sept 2013, In: Journal of Cell Biology. 202, 6, p. 951-66 16 p.

Ficolin-1-PTX3 Complex Formation Promotes Clearance of Altered Self-Cells and Modulates IL-8 Production
Ma, Y. J., Doni, A., Romani, L., Jürgensen, H. J., Behrendt, N., Mantovani, A. & Garred, P., 1 Jul 2013, In: Journal of Immunology. 191, 3, p. 1324-33

Targeting a single function of the multifunctional matrix metalloprotease MT1-MMP. Impact on lymphangiogenesis
Ingvarsen, S., Porse, A., Erpicum, C., Maertens, L., Jürgensen, H. J., Madsen, D. H., Carlsen Melander, E. M., Gårdsvoll, H., Høyer-Hansen, G., Noel, A., Holmbeck, K., Engelholm, L. H. & Behrendt, N., 12 Apr 2013, In: Journal of Biological Chemistry. 288, 15, p. 10195-204

Differential Actions of the Endocytic Collagen Receptor uPARAP/Endo180 and the Collagenase MMP-2 in Bone Homeostasis
Madsen, D. H., Jürgensen, H. J., Ingvarsen, S., Carlsen Melander, E. M., Albrechtsen, R., Hald, A., Holmbeck, K., Bugge, T. H., Behrendt, N. & Engelholm, L. H., 2013, In: P L o S One. 8, 8, p. e71261

Endocytic collagen degradation: A novel mechanism involved in the protection against liver fibrosis
Madsen, D. H., Jürgensen, H. J., Ingvarsen, S., Carlsen Melander, E. M., Vainer, B., Egerod, K. L., Hald, A., Rønø, B., Madsen, M. C., Bugge, T. H., Engelholm, L. H. & Behrendt, N., May 2012, In: Journal of Pathology. 227, 1, p. 94-105

Inhibitory Monoclonal Antibodies against Mouse Proteases Raised in Gene-Deficient Mice Block Proteolytic Functions in vivo
Lund, I. K., Rasch, M. G., Ingvarsen, S., Pass, J., Madsen, D. H., Engelholm, L. H., Behrendt, N. & Høyer-Hansen, G., 2012, In: Frontiers in Pharmacology. 3, p. 122

New and paradoxical roles of matrix metalloproteinases in the tumor microenvironment
Noël, A., Gutiérrez-Fernández, A., Sounni, N. E., Behrendt, N., Maquoi, E., Lund, I. K., Cal, S., Hoyer-Hansen, G. & López-Otín, C., 2012, In: Frontiers in Pharmacology. 3, p. 140

A novel functional role of collagen glycosylation: interaction with the endocytic collagen receptor uparap/ENDO180
Jürgensen, H. J., Madsen, D. H., Ingvarsen, S., Carlsen Melander, E. M., Gårdsvoll, H., Patthy, L., Engelholm, L. H. & Behrendt, N., 2011, In: Journal of Biological Chemistry. 286, 37, p. 32736-48 13 p.

Conformational regulation of urokinase receptor function: impact of receptor occupancy and epitope-mapped monoclonal antibodies on lamellipodia induction
Gårdsvoll, H., Jacobsen, B., Kriegbaum, M. C., Behrendt, N., Engelholm, L., Østergaard, S. & Ploug, M., 2011, In: Journal of Biological Chemistry. 286, 38, p. 33544-56 13 p.

The non-phagocytic route of collagen uptake: a distinct degradation pathway
Madsen, D. H., Ingvarsen, S., Jürgensen, H. J., Melander, M. C., Kjøller, L., Moyer, A., Honoré, C., Madsen, M. C., Garred, P., Burgdorf, S., Bugge, T. H., Behrendt, N. & Engelholm, L. H., 2011, In: Journal of Biological Chemistry. 286, 30 , p. 26996-7010 15 p.

MT1-MMP and type II collagen specify skeletal stem cells and their bone and cartilage progeny
Szabova, L., Yamada, S. S., Wimer, H., Chrysovergis, K., Ingvarsen, S., Behrendt, N., Engelholm, L. H. & Holmbeck, K., Nov 2009, In: Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research. 24, 11, p. 1905-16 12 p.

The collagen receptor uPARAP/Endo180
Engelholm, L. H., Ingvarsen, S., Jürgensen, H. J., Hillig, T., Madsen, D. H., Nielsen, B. S. & Behrendt, N., 2009, In: Frontiers in Bioscience. 14, p. 2103-14 11 p.

Antibody-mediated targeting of the urokinase-type plasminogen activator proteolytic function neutralizes fibrinolysis in vivo
Lund, I. K., Jögi, A., Rønø, B., Rasch, M. G., Lund, L. R., Almholt, K., Gårdsvoll, H., Behrendt, N., Rømer, J. & Høyer-Hansen, G., 21 Nov 2008, In: Journal of Biological Chemistry. 283, 47, p. 32506-15 10 p.

Dimerization of endogenous MT1-MMP is a regulatory step in the activation of the 72-kDa gelatinase MMP-2 on fibroblasts and fibrosarcoma cells
Ingvarsen, S., Madsen, D. H., Hillig, T., Lund, L. R., Holmbeck, K., Behrendt, N. & Engelholm, L. H., Jul 2008, In: Biological Chemistry. 389, 7, p. 943-53 11 p.

A composite role of vitronectin and urokinase in the modulation of cell morphology upon expression of the urokinase receptor
Hillig, T., Engelholm, L. H., Ingvarsen, S., Madsen, D. H., Gårdsvoll, H., Larsen, J. K., Ploug, M., Danø, K., Kjøller, L. & Behrendt, N., 30 May 2008, In: Journal of Biological Chemistry. 283, 22, p. 15217-23 7 p.

Extracellular collagenases and the endocytic receptor, urokinase plasminogen activator receptor-associated protein/Endo180, cooperate in fibroblast-mediated collagen degradation
Madsen, D. H., Engelholm, L. H., Ingvarsen, S., Hillig, T., Wagenaar-Miller, R. A., Kjøller, L., Gårdsvoll, H., Høyer-Hansen, G., Holmbeck, K., Bugge, T. H. & Behrendt, N., 14 Sept 2007, In: Journal of Biological Chemistry. 282, 37, p. 27037-45 9 p.

Complementary roles of intracellular and pericellular collagen degradation pathways in vivo
Wagenaar-Miller, R. A., Engelholm, L. H., Gavard, J., Yamada, S. S., Gutkind, J. S., Behrendt, N., Bugge, T. H. & Holmbeck, K., Sept 2007, In: Molecular and Cellular Biology. 27, 18, p. 6309-22 14 p.

Increased expression of the collagen internalization receptor uPARAP/Endo180 in the stroma of head and neck cancer
Sulek, J., Wagenaar-Miller, R. A., Shireman, J., Molinolo, A., Madsen, D. H., Engelholm, L. H., Behrendt, N. & Bugge, T. H., Apr 2007, In: The journal of histochemistry and cytochemistry : official journal of the Histochemistry Society. 55, 4, p. 347-53 7 p.

Intracellular collagen degradation mediated by uPARAP/Endo180 is a major pathway of extracellular matrix turnover during malignancy
Curino, A. C., Engelholm, L. H., Yamada, S. S., Holmbeck, K., Lund, L. R., Molinolo, A. A., Behrendt, N., Nielsen, B. S. & Bugge, T. H., 20 Jun 2005, In: Journal of Cell Biology. 169, 6, p. 977-85 9 p.

Plasminogen activation and cancer
Danø, K., Behrendt, N., Høyer-Hansen, G., Johnsen, M., Lund, L. R., Ploug, M. & Rømer, J., Apr 2005, In: Thrombosis and Haemostasis. 93, 4, p. 676-81 6 p.

Cysteine-rich secretory protein 3 is a ligand of alpha1B-glycoprotein in human plasma
Udby, L., Sørensen, O. E., Pass, J., Johnsen, A. H., Behrendt, N., Borregaard, N. & Kjeldsen, L., 12 Oct 2004, In: Biochemistry. 43, 40, p. 12877-86 10 p.

uPARAP/endo180 directs lysosomal delivery and degradation of collagen IV
Kjøller, L., Engelholm, L. H., Høyer-Hansen, M., Danø, K., Bugge, T. H. & Behrendt, N., 1 Feb 2004, In: Experimental Cell Research. 293, 1, p. 106-16 11 p.

The urokinase receptor (uPAR) and the uPAR-associated protein (uPARAP/Endo180): membrane proteins engaged in matrix turnover during tissue remodeling
Behrendt, N., Feb 2004, In: Biological Chemistry. 385, 2, p. 103-36 34 p.

The pro-urokinase plasminogen-activation system in the presence of serpin-type inhibitors and the urokinase receptor: rescue of activity through reciprocal pro-enzyme activation
Behrendt, N., List, K., Andreasen, P. A. & Danø, K., 15 Apr 2003, In: Biochemical Journal. 371, Pt 2, p. 277-87 11 p.

uPARAP/Endo180 is essential for cellular uptake of collagen and promotes fibroblast collagen adhesion
Engelholm, L. H., List, K., Netzel-Arnett, S., Cukierman, E., Mitola, D. J., Aaronson, H., Kjøller, L., Larsen, J. K., Yamada, K. M., Strickland, D. K., Holmbeck, K., Danø, K., Birkedal-Hansen, H., Behrendt, N. & Bugge, T. H., 31 Mar 2003, In: Journal of Cell Biology. 160, 7, p. 1009-15 7 p.

Matriptase/MT-SP1 is required for postnatal survival, epidermal barrier function, hair follicle development, and thymic homeostasis
List, K., Haudenschild, C. C., Szabo, R., Chen, W., Wahl, S. M., Swaim, W., Engelholm, L. H., Behrendt, N. & Bugge, T. H., 23 May 2002, In: Oncogene. 21, 23, p. 3765-79 15 p.

Urokinase receptor-associated protein (uPARAP) is expressed in connection with malignant as well as benign lesions of the human breast and occurs in specific populations of stromal cells
Schnack Nielsen, B., Rank, F., Engelholm, L. H., Holm, A., Danø, K. & Behrendt, N., 10 Apr 2002, In: International Journal of Cancer. 98, 5, p. 656-64 9 p.

The urokinase plasminogen activator receptor-associated protein/endo180 is coexpressed with its interaction partners urokinase plasminogen activator receptor and matrix metalloprotease-13 during osteogenesis
Engelholm, L. H., Nielsen, B. S., Netzel-Arnett, S., Solberg, H., Chen, X. D., Lopez Garcia, J. M., Lopez-Otin, C., Young, M. F., Birkedal-Hansen, H., Danø, K., Lund, L. R., Behrendt, N. & Bugge, T. H., Oct 2001, In: Laboratory investigation; a journal of technical methods and pathology. 81, 10, p. 1403-14 12 p.

Urokinase-catalysed cleavage of the urokinase receptor requires an intact glycolipid anchor
Høyer-Hansen, G., Pessara, U., Holm, A., Pass, J., Weidle, U., Danø, K. & Behrendt, N., 15 Sept 2001, In: Biochemical Journal. 358, Pt 3, p. 673-9 7 p.

Differential binding of urokinase and peptide antagonists to the urokinase receptor: evidence from characterization of the receptor in four primate species
Engelholm, L. H. & Behrendt, N., Mar 2001, In: Biological Chemistry. 382, 3, p. 435-42 8 p.

The urokinase receptor associated protein (uPARAP/endo180): a novel internalization receptor connected to the plasminogen activation system
Engelholm, L. H., Nielsen, B. S., Danø, K. & Behrendt, N., Jan 2001, In: Trends in Cardiovascular Medicine. 11, 1, p. 7-13 7 p.

Plasminogen-independent initiation of the pro-urokinase activation cascade in vivo. Activation of pro-urokinase by glandular kallikrein (mGK-6) in plasminogen-deficient mice
List, K., Jensen, O. N., Bugge, T. H., Lund, L. R., Ploug, M., Danø, K. & Behrendt, N., 25 Jan 2000, In: Biochemistry. 39, 3 , p. 508-15 8 p.

A urokinase receptor-associated protein with specific collagen binding properties
Behrendt, N., Jensen, O. N., Engelholm, L. H., Mørtz, E., Mann, M. & Danø, K., 21 Jan 2000, In: Journal of Biological Chemistry. 275, 3, p. 1993-2002 10 p.

Different mechanisms are involved in the antibody mediated inhibition of ligand binding to the urokinase receptor: a study based on biosensor technology
List, K., Høyer-Hansen, G., Rønne, E., Danø, K. & Behrendt, N., 1 Jan 1999, In: Journal of Immunological Methods. 222, 1-2, p. 125-33 9 p.

The intact urokinase receptor is required for efficient vitronectin binding: receptor cleavage prevents ligand interaction
Høyer-Hansen, G., Behrendt, N., Ploug, M., Danø, K. & Preissner, K. T., 22 Dec 1997, In: F E B S Letters. 420, 1, p. 79-85 7 p.

ELISA for complexes between urokinase-type plasminogen activator and its receptor in lung cancer tissue extracts
de Witte, H., Pappot, H., Brünner, N., Grøndahl-Hansen, J., Hoyer-Hansen, G., Behrendt, N., Guldhammer-Skov, B., Sweep, F., Benraad, T. & Danø, K., 29 Jul 1997, In: International Journal of Cancer. 72, 3, p. 416-23 8 p.

Cell-surface acceleration of urokinase-catalyzed receptor cleavage
Høyer-Hansen, G., Ploug, M., Behrendt, N., Rønne, E. & Danø, K., 15 Jan 1997, In: European Journal of Biochemistry. 243, 1-2, p. 21-6 6 p.

Structure, function and expression on blood and bone marrow cells of the urokinase-type plasminogen activator receptor, uPAR
Plesner, T., Behrendt, N. & Ploug, M., 1997, In: Stem cells (Dayton, Ohio). 15, 6, p. 398-408 11 p.

Domain interplay in the urokinase receptor. Requirement for the third domain in high affinity ligand binding and demonstration of ligand contact sites in distinct receptor domains
Behrendt, N., Ronne, E. & Dano, K., 13 Sept 1996, In: Journal of Biological Chemistry. 271, 37, p. 22885-94 10 p.

Effect of purified, soluble urokinase receptor on the plasminogen-prourokinase activation system
Behrendt, N. & Danø, K., 9 Sept 1996, In: F E B S Letters. 393, 1, p. 31-6 6 p.

The structure and function of the urokinase receptor, a membrane protein governing plasminogen activation on the cell surface
Behrendt, N., Rønne, E. & Danø, K., May 1995, In: Biological Chemistry Hoppe-Seyler. 376, 5, p. 269-79 11 p.

Quantitation of the receptor for urokinase plasminogen activator by enzyme-linked immunosorbent assay
Rønne, E., Behrendt, N., Ploug, M., Nielsen, H. J., Wöllisch, E., Weidle, U., Danø, K. & Høyer-Hansen, G., 3 Jan 1994, In: Journal of Immunological Methods. 167, 1-2, p. 91-101 11 p.

Studies on functional and structural role of urokinase receptor and other components of the plasminogen activation system in malignancy
Weidle, U. H., Wöllisch, E., Rønne, E., Ploug, M., Behrendt, N., de Vries, T. J., Quax, P. H., Verheijen, J. H., van Muijen, G. N. & Ruiter, D. J., 1994, In: Annales de Biologie Clinique. 52, 11, p. 775-82 8 p.

A novel, specific pro-urokinase complex on monocyte-like cells, detected by transglutaminase-catalyzed cross-linking
Behrendt, N., Rønne, E. & Danø, K., 28 Dec 1993, In: F E B S Letters. 336, 3, p. 394-6 3 p.

Binding of the urokinase-type plasminogen activator to its cell surface receptor is inhibited by low doses of suramin
Behrendt, N., Rønne, E. & Danø, K., 15 Mar 1993, In: Journal of Biological Chemistry. 268, 8, p. 5985-9 5 p.

Urokinase plasminogen activator cleaves its cell surface receptor releasing the ligand-binding domain
Høyer-Hansen, G., Rønne, E., Solberg, H., Behrendt, N., Ploug, M., Lund, L. R., Ellis, V. & Danø, K., 5 Sept 1992, In: Journal of Biological Chemistry. 267, 25, p. 18224-9 6 p.

Identification and characterization of the murine cell surface receptor for the urokinase-type plasminogen activator
Solberg, H., Løber, D., Eriksen, J., Ploug, M., Rønne, E., Behrendt, N., Danø, K. & Høyer-Hansen, G., 15 Apr 1992, In: European Journal of Biochemistry. 205, 2, p. 451-8 8 p.

Cell-induced potentiation of the plasminogen activation system is abolished by a monoclonal antibody that recognizes the NH2-terminal domain of the urokinase receptor
Rønne, E., Behrendt, N., Ellis, V., Ploug, M., Danø, K. & Høyer-Hansen, G., 19 Aug 1991, In: F E B S Letters. 288, 1-2, p. 233-6 4 p.

Plasminogen activation by receptor-bound urokinase. A kinetic study with both cell-associated and isolated receptor
Ellis, V., Behrendt, N. & Danø, K., 5 Jul 1991, In: Journal of Biological Chemistry. 266, 19, p. 12752-8 7 p.

Protein structure and membrane anchorage of the cellular receptor for urokinase-type plasminogen activator
Ploug, M., Behrendt, N., Løber, D. & Danø, K., Jul 1991, In: Seminars in Thrombosis and Hemostasis. 17, 3, p. 183-93 11 p.

The ligand-binding domain of the cell surface receptor for urokinase-type plasminogen activator
Behrendt, N., Ploug, M., Patthy, L., Houen, G., Blasi, F. & Danø, K., 25 Apr 1991, In: Journal of Biological Chemistry. 266, 12, p. 7842-7 6 p.

Urokinase receptor mRNA level and gene transcription are strongly and rapidly increased by phorbol myristate acetate in human monocyte-like U937 cells
Lund, L. R., Rønne, E., Roldan, A. L., Behrendt, N., Rømer, J., Blasi, F. & Danø, K., 15 Mar 1991, In: Journal of Biological Chemistry. 266, 8, p. 5177-81 5 p.

Identification and localization of a soluble antigen, Ag2, of 136 kDa from Plasmodium falciparum in vitro cultures
Jakobsen, P. H., Grellier, P., Theander, T. G., Behrendt, N., Torii, M., Aikawa, M., Schrevel, J. & Jepsen, S., Feb 1991, In: APMIS : acta pathologica, microbiologica, et immunologica Scandinavica. 99, 2, p. 155-62 8 p.

Cellular receptor for urokinase plasminogen activator. Carboxyl-terminal processing and membrane anchoring by glycosyl-phosphatidylinositol
Ploug, M., Rønne, E., Behrendt, N., Jensen, A. L., Blasi, F. & Danø, K., 25 Jan 1991, In: Journal of Biological Chemistry. 266, 3, p. 1926-33 8 p.

The urokinase receptor and regulation of cell surface plasminogen activation
Blasi, F., Behrendt, N., Cubellis, M. V., Ellis, V., Lund, L. R., Masucci, M. T., Møller, L. B., Olson, D. P., Pedersen, N. & Ploug, M., 2 Dec 1990, In: Cell differentiation and development : the official journal of the International Society of Developmental Biologists. 32, 3, p. 247-53 7 p.

Characterization of human endothelial cell urokinase-type plasminogen activator receptor protein and messenger RNA
Barnathan, E. S., Kuo, A., Karikó, K., Rosenfeld, L., Murray, S. C., Behrendt, N., Rønne, E., Weiner, D., Henkin, J. & Cines, D. B., 1 Nov 1990, In: Blood. 76, 9, p. 1795-806 12 p.

Inhibition of receptor-bound urokinase by plasminogen-activator inhibitors
Ellis, V. J., Wun, T. C., Behrendt, N., Rønne, E. & Danø, K., 15 Jun 1990, In: Journal of Biological Chemistry. 265, 17, p. 9904-8 5 p.

The human receptor for urokinase plasminogen activator. NH2-terminal amino acid sequence and glycosylation variants
Behrendt, N., Rønne, E., Ploug, M., Petri, T., Løber, D., Nielsen, L. S., Schleuning, W. D., Blasi, F., Appella, E. & Danø, K., 15 Apr 1990, In: Journal of Biological Chemistry. 265, 11, p. 6453-60 8 p.

Localization of urokinase-type plasminogen activator receptor on U937 cells: phorbol ester PMA induces heterogeneity
Hansen, S. H., Behrendt, N., Danø, K. & Kristensen, P., Apr 1990, In: Experimental Cell Research. 187, 2, p. 255-62 8 p.

Cloning and expression of the receptor for human urokinase plasminogen activator, a central molecule in cell surface, plasmin dependent proteolysis
Roldan, A. L., Cubellis, M. V., Masucci, M. T., Behrendt, N., Lund, L. R., Danø, K., Appella, E. & Blasi, F., Feb 1990, In: E M B O Journal. 9, 2, p. 467-74 8 p.

Activation of pro-urokinase and plasminogen on human sarcoma cells: a proteolytic system with surface-bound reactants
Stephens, R. W., Pöllänen, J., Tapiovaara, H., Leung, K. C., Sim, P. S., Salonen, E. M., Rønne, E., Behrendt, N., Danø, K. & Vaheri, A., May 1989, In: Journal of Cell Biology. 108, 5, p. 1987-95 9 p.

Regulation of urokinase receptors in monocytelike U937 cells by phorbol ester phorbol myristate acetate
Picone, R., Kajtaniak, E. L., Nielsen, L. S., Behrendt, N., Mastronicola, M. R., Cubellis, M. V., Stoppelli, M. P., Pedersen, S., Danø, K. & Blasi, F., Feb 1989, In: Journal of Cell Biology. 108, 2, p. 693-702 10 p.

A 55,000-60,000 Mr receptor protein for urokinase-type plasminogen activator. Identification in human tumor cell lines and partial purification
Nielsen, L. S., Kellerman, G. M., Behrendt, N., Picone, R., Danø, K. & Blasi, F., 15 Feb 1988, In: Journal of Biological Chemistry. 263, 5, p. 2358-63 6 p.

Localization and functional significance of a polymorphic determinant in the third component of human complement
Behrendt, N., Hansen, O. C., Ploug, M., Barkholt, V. & Koch, C., Oct 1987, In: Molecular Immunology. 24, 10, p. 1097-103 7 p.

A novel polymorphism of human complement component C3 detected by means of a monoclonal antibody
Koch, C. & Behrendt, N., 1986, In: Immunogenetics. 23, 5, p. 322-5 4 p.

Human complement component C3: characterization of active C3 S and C3 F, the two common genetic variants
Behrendt, N., Aug 1985, In: Molecular Immunology. 22, 8, p. 1005-8 4 p.