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Department of Chemistry and Bioscience
The Faculty of Engineering and Science
Section of Biotechnology
Bioengineering
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Research profile

The research of Peter Kristensen is centered on the technical development and application of methods that allow Darwinian evolution of proteins using directed evolution technologies. The main scientific contributions have more specifically been in the area of recombinant antibodies and methods of isolating such antibodies from large libraries. In addition Peter Kristensen was the first to develop technologies which allow isolation of proteins with improved stabilities from large libraries of mutants. The interest to make technological developments based on recombinant antibodies and for manipulating protein stability and activity, were initiated while Peter Kristensen performed his post doc at the MRC-LMB in Cambridge in the group of Nobel Laureate Sir Greg Winter. However to justify technological development, the technology developed should be able to provide new insight or solve important problems and here we have especially focused attention at finding novel biomarkers which can be used in characterization of important human conditions, such as age related diseases and rare circulating cells in the blood, just to mention the most relevant example. Most recently, the research has involved the use of non-natural amino acids for immobilization and conjugation of recombinant antibodies and proteins of industrial interest and novel biosensors building on recombinant antibody technology.

Qualifications

Chemistry and Biotechnology, PhD, Aarhus University
1992 → 2 Oct 1995
Award Date: 2 Oct 1995

Chemistry and Biotechnology, MSc, Aarhus University
1 Sep 1986 → 30 Jun 1992
Award Date: 1 Jun 1992

Employment

Associate Professor

Department of Chemistry and Bioscience
The Faculty of Engineering and Science
Aalborg, Denmark
1 Dec 2017 → present

Associate Professor

The Faculty of Engineering and Science
Aalborg Øst, Denmark
1 Dec 2017 → present

Associate Professor

Section of Biotechnology
The Faculty of Engineering and Science
Aalborg, Denmark
1 Dec 2017 → present

Bioengineering

The Faculty of Engineering and Science
1 Jan 2019 → present

Medical Biotechnology

The Faculty of Engineering and Science
1 Jan 2019 → present

Associate Professor (MSK)

Department of Engineering, Aarhus University, Gustav Wieds Vej 10C, Aarhus C, DK-8000, Denmark.
1 Jan 2010 → 1 Jan 2017

Associate Professor (MSK)

Department of Molecular Biology and Genetics, Aarhus University, Gustav Wieds Vej 10, Aarhus, Denmark.
1 Jan 2003 → 1 Jan 2010

Senior Scientist

Aarhus Universityhospital, Denmark
1 Jan 2001 → 1 Jan 2002

Research Associate Professor

Department of Molecular Biology and Genetics, Aarhus University, Gustav Wieds Vej 10, Aarhus, Denmark.
1 Jan 2000 → 1 Jan 2001

Research Assistant Professor

Department of Molecular Biology and Genetics, Aarhus University, Gustav Wieds Vej 10, Aarhus, Denmark.
1 Jan 1998 → 1 Jan 2000

Research Scientist

Medical Research Council Centre, Laboratory for Molecular Biology (MRC-LMB)
Cambridge, United Kingdom
1 Jan 1997 → 1 Jan 1998

Post-doctoral Fellow

Medical Research Council Centre, Laboratory for Molecular Biology (MRC-LMB)
Cambridge, United Kingdom
1 Jan 1995 → 1 Jan 1997

Research outputs

Effects of the engineering of a single binding pocket residue on specificity and regioselectivity of hydratases from *Lactobacillus Acidophilus*

Zhang, Y., Eser, B. E., Kougioumtzoglou, G., Eser, Z., Poborsky, M., Kishino, S., Takeuchi, M., Ogawa, J., Kristensen, P. & Guo, Z., Jul 2021, In: Biochemical Engineering Journal. 171, 108006.

Fatty acid hydratase for value-added biotransformation: A review

Zhang, Y., Eser, B. E., Kristensen, P. & Guo, Z., Aug 2020, In: Chinese Journal of Chemical Engineering. 28, 8, p. 2051-2063 13 p.

Rational Engineering of Hydratase from *Lactobacillus Acidophilus* Reveals Critical Residues Directing Substrate Specificity and Regioselectivity

Eser, B. E., Poborsky, M., Dai, R., Kishino, S., Ljubic, A., Takeuchi, M., Jacobsen, C., Ogawa, J., Kristensen, P. & Guo, Z., 17 Feb 2020, In: ChemBioChem. 21, 4, p. 550-563 14 p.

ReactELISA method for quantifying methylglyoxal levels in plasma and cell cultures

Kold-Christensen, R., Jensen, K. K., Smedegård-Holmquist, E., Sørensen, L. K., Hansen, J., Jørgensen, K. A., Kristensen, P. & Johannsen, M., 1 Sep 2019, In: Redox Biology. 26, 101252.

Insight into the structure and activity of surface-engineered lipase biofluids

Zhou, Y., Jones, N. C., Pedersen, J. N., Pérez, B., Hoffmann, S. V., Petersen, S. V., Pedersen, J. S., Perriman, A., Kristensen, P., Gao, R. & Guo, Z., 15 May 2019, In: ChemBioChem. 20, 10, p. 1266-1272 7 p.

Incorporation of bacteriophages in polycaprolactone/collagen fibers for antibacterial hemostatic dual-function

Cheng, W., Zhang, Z., Xu, R., Cai, P., Kristensen, P., Chen, M. & Huang, Y., 1 Oct 2018, In: Journal of Biomedical Materials Research - Part B Applied Biomaterials. 106, 7, p. 2588-2595 8 p.

A Single-Domain Antibody Targeting Complement Component C5 Acts as a Selective Inhibitor of the Terminal Pathway of the Complement System and Thus Functionally Mimicks the C-Terminal Domain of the *Staphylococcus aureus* SSL7 Protein

Yatime, L., Merle, N. S., Hansen, A. G., Friis, N. A., Østergaard, J. A., Bjerre, M., Roumenina, L. T., Thiel, S., Kristensen, P. & Andersen, G. R., 2018, In: Frontiers in Immunology. 9, NOV, 11 p., 02822.

On-slide detection of enzymatic activities in selected single cells

Keller, J. G., Tesauro, C., Coletta, A., Graversen, A. D., Ho, Y. P., Kristensen, P., Stougaard, M. & Knudsen, B. R., 28 Sep 2017, In: Nanoscale. 9, 36, p. 13546-13553 8 p.

Pericyte modulation by a functional antibody obtained by a novel single-cell selection strategy

Just, J., Lykkemark, S., Nielsen, C. H., Roshenas, A. R., Drasbek, K. R., Petersen, S. V., Bek, T. & Kristensen, P., 1 Aug 2017, In: Microcirculation. 24, 6, e12365.

An anti vimentin antibody promotes tube formation

Jørgensen, M. L., Møller, C. K., Rasmussen, L., Boisen, L., Pedersen, H. & Kristensen, P., 15 Jun 2017, In: Scientific Reports. 7, 1, 3576.

A novel excision selection method for isolation of antibodies binding antigens expressed specifically by rare cells in tissue sections

Lykkemark, S., Mandrup, O. A., Jensen, M. B., Just, J. & Kristensen, P., 1 Jun 2017, In: Nucleic Acids Research. 45, 11, p. e107

ReactELISA: Monitoring a Carbon Nucleophilic Metabolite by ELISA - A Study of Lipid Metabolism

Holmquist, E. F., Keiding, B. U., Kold-Christensen, R., Salomón, T., Jørgensen, K. A., Kristensen, P., Poulsen, T. B. & Johannsen, M., 2 May 2017, In: Analytical Chemistry. 89, 9, p. 5066-5071 6 p.

Targeting of phage particles towards endothelial cells by antibodies selected through a multi-parameter selection strategy

Mandrup, O. A., Lykkemark, S. & Kristensen, P., 10 Feb 2017, In: Scientific Reports. 7, 42230.

Upregulation of Mrps18a in breast cancer identified by selecting phage antibody libraries on breast tissue sections

Sørensen, K. M. J., Meldgaard, T., Melchjorsen, C. J., Fridriksdottir, A. J., Pedersen, H., Petersen, O. W. & Kristensen, P., 5 Jan 2017, In: BMC Cancer. 17, 1, 19.

ReactELISA - a novel approach to monitoring lipid metabolism

Keiding, U., Holmquist, E. F., Jørgensen, K. A., Kristensen, P. & Johannsen, M., 31 Aug 2016.

Fra polyklonale til biosimilære antistoffer

Kristensen, P., Aug 2016, In: BestPractice. Reumatologi.

Raising an antibody specific to breast cancer subpopulations using phage display on tissue sections

Larsen, S. A., Meldgaard, T., Fridriksdottir, A. J. R., Lykkemark, S., Poulsen, P. C., Overgaard, L. F., Petersen, H. B., Petersen, O. W. & Kristensen, P., 1 Jan 2016, In: Cancer Genomics and Proteomics. 13, 1, p. 21-30 10 p.

Identification of an unstable 4-hydroxynoneal modification on the 20S proteasome subunit $\alpha 7$ by recombinant antibody technology.

Just, J., Jung, T., Friis, N. A., Lykkemark, S., Drasbek, K., Siboska, G., Grune, T. & Kristensen, P., 1 Dec 2015, In: Free Radical Biology and Medicine. 89, p. 786-792 7 p.

MARK-AGE biomarkers of ageing

Bürkle, A., Moreno-Villanueva, M., Bernhard, J., Blasco, M., Zondag, G., Hoeijmakers, J. H. J., Toussaint, O., Grubeck-Loebenstein, B., Mocchegiani, E., Collino, S., Gonos, E. S., Sikora, E., Gradinaru, D., Dollé, M., Salmon, M., Kristensen, P., Griffiths, H. R., Libert, C., Grune, T., Breusing, N. & 10 others, Simm, A., Franceschi, C., Capri, M., Talbot, D., Caiafa, P., Friguet, B., Slagboom, P. E., Hervonen, A., Hurme, M. & Aspinall, R., 1 Nov 2015, In: Mechanisms of Ageing and Development. 151, p. 2-12 11 p.

Selection of a breast cancer subpopulation-specific antibody using phage display on tissue sections

Larsen, S. A., Meldgaard, T., Fridriksdottir, A. J., Lykkemark, S., Poulsen, P. C., Overgaard, L. F., Petersen, H. B., Petersen, O. W. & Kristensen, P., 18 Jul 2015, In: Immunologic Research. 62, 3, p. 263-272 10 p.

Selection of cell-type specific antibodies on tissue-sections using phage display

Larsen, S. A., Meldgaard, T., Lykkemark, S., Mandrup, O. A. & Kristensen, P., 1 Jan 2015, In: Journal of Cellular and Molecular Medicine. 19, 8, p. 1939-1948 10 p.

Selection strategies for anticancer antibody discovery: Searching off the beaten path

Sánchez-Martín, D., Sørensen, M. D., Lykkemark, S., Sanz, L., Kristensen, P., Ruoslahti, E. & Álvarez-Vallina, L., 1 Jan 2015, In: Trends in Biotechnology. 33, 5, p. 292-301 10 p.

Novel ageing-biomarker discovery using data-intensive technologies

Griffiths, H. R., Augustyniak, E. M., Bennett, S. J., Debacq-Chainiaux, F., Dunston, C. R., Kristensen, P., Melchjorsen, C. J., Navarrete, S. A., Simm, A. & Toussaint, O., 12 Dec 2014, In: Mechanisms of Ageing and Development. 151, p. 114-121 8 p.

Degradation of C-terminal tag sequences on domain antibodies purified from E. coli supernatant

Lykkemark, S., Mandrup, O. A., Friis, N. A. & Kristensen, P., 1 Nov 2014, In: mAbs. 6, 6, p. 1551-1559 9 p.

Expression of single-chain variable fragments fused with the Fc-region of rabbit IgG in Leishmania tarentolae

Jørgensen, M. L., Friis, N. A., Just, J., Madsen, P., Petersen, S. V. & Kristensen, P., 15 Jan 2014, In: Microbial Cell Factories. 13, 1, 9.

Are endothelial outgrowth cells a potential source for future re-vascularization therapy?

Bertelsen, L. B., Bohn, A. B., Smith, M., Mølgaard, B., Møller, B., Stødkilde-Jørgensen, H. & Kristensen, P., 1 Jan 2014, In: Experimental Gerontology. 58, p. 132-138 7 p.

The co-occurrence of mtDNA mutations on different oxidative phosphorylation subunits, not detected by haplogroup analysis, affects human longevity and is population specific

Raule, N., Sevini, F., Li, S., Barbieri, A., Tallaro, F., Lomartire, L., Vianello, D., Montesanto, A., Moilanen, J. S., Bezrukov, V., Blanché, H., Hervonen, A., Christensen, K., Deiana, L., Gonos, E. S., Kirkwood, T. B. L., Kristensen, P., Leon, A., Pelicci, P. G., Poulain, M. & 18 others, Rea, I. M., Remacle, J., Robine, J. M., Schreiber, S., Sikora, E., Eline Slagboom, P., Spazzafumo, L., Antonietta Stazi, M., Toussaint, O., Vaupel, J. W., Rose, G., Majamaa, K., Perola, M., Johnson, T. E., Bolund, L., Yang, H., Passarino, G. & Franceschi, C., 1 Jan 2014, In: Aging Cell. 13, 3, p. 401-407 7 p.

A Novel Heavy Domain Antibody Library with Functionally Optimized Complementarity Determining Regions

Mandrup, O. A., Friis, N. A., Lykkemark, S., Just, J. & Kristensen, P., 8 Oct 2013, In: PLOS ONE. 8, 10, e76834.

Raising antibodies against circulating foetal cells from maternal peripheral blood

Sørensen, M. D., Melchjorsen, C. J., Mandrup, O. A. & Kristensen, P., 1 Mar 2013, In: Prenatal Diagnosis. 33, 3, p. 284-291 8 p.

How to classify the oldest old according to their health status: A study on 1160 subjects belonging to 552 90+ Italian sibships characterized by familial longevity recruited within the GEHA EU Project

Cevenini, E., Cotichini, R., Stazi, M. A., Taccaceli, V., Scurti, M., Mari, V., Berardelli, M., Passarino, G., Jeune, B., Franceschi, C., Bezrukov, V., Blanché, H., Bolund, L., Christensen, K., Deiana, L., Gonos, E., Hervonen, A., Kirkwood, T. B. L., Kristensen, P., Leon, A. & 12 others, Pelicci, P. G., Perola, M., Poulain, M., Rea, I. M., Remacle, J., Robine, J. M., Schreiber, S., Sikora, E., Slagboom, P. E., Spazzafumo, L., Toussaint, O. & Vaupel, J. W., 1 Jan 2013, In: *Mechanisms of Ageing and Development*. 134, 11-12, p. 560-569 10 p.

DETECTION OF FETAL CELLS FROM MATERNAL BLOOD

Koelvraa, S., Christensen, B., Schelde, P., Sorensen Morten, D. & Kristensen, P., 22 Mar 2012, IPC No. G01N 33/ 82 A I, Patent No. US2012070827, Priority date 27 Jun 2011, Priority No. US201113169922

Selection of antibodies against CD117pos/CD45neg cardiomyocyte progenitor stem cells using phage display

Larsen, J. R., Young, J. F., Hokland, M. & Kristensen, P., 11 Feb 2012.

Identification and analysis of cell-specific biomarkers of breast cancer subpopulations by recombinant antibody selection

Larsen, S. A., Meldgaard, T. E. M., Mandrup, O. A., Olesen, C., Fridriksdottir, A., Holst, B. & Kristensen, P., 23 Jan 2012.

Modular and aggregation resistant Vh antibodies from a phage display library

Friis, N. A., Mandrup, O. A., Lykkemark, S., Castrillon, C. & Kristensen, P., 23 Jan 2012.

Selection of Cell specific antibodies using Antibody Phage Display

Just, J., Lykkemark, S. & Kristensen, P., 2012.

Selection of Recombinant Antibodies against CNS pericytes using Phage Display

Just, J., Lykkemark, S., Drasbek, K. R. & Kristensen, P., 2012.

Design, recruitment, logistics, and data management of the GEHA (Genetics of Healthy Ageing) project

Skytthe, A., Valensin, S., Jeune, B., Cevenini, E., Balard, F., Beekman, M., Bezrukov, V., Blanche, H., Bolund, L., Broczek, K., Carru, C., Christensen, K., Christiansen, L., Collerton, J. C., Cotichini, R., de Craen, A. J. M., Dato, S., Davies, K., De Benedictis, G., Deiana, L. & 30 others, Flachsbarth, F., Gampe, J., Gilbault, C., Gonos, E. S., Haimes, E., Hervonen, A., Hurme, M. A., Janiszewska, D., Jylhä, M., Kirkwood, T. B. L., Kristensen, P., Laiho, P., Leon, A., Marchisio, A., Masciulli, R., Nebel, A., Passarino, G., Pelicci, G., Peltonen, L., Perola, M., Poulain, M., Rea, I. M., Remacle, J., Robine, J. M., Schreiber, S., Scurti, M., Sevini, F., Sikora, E., Skouteri, A. & Slagboom, P. E., 1 Nov 2011, In: *Experimental Gerontology*. 46, 11, p. 934-945 12 p.

Selection of antibodies against a single rare cell present in a heterogeneous population using phage display

Sørensen, M. D. & Kristensen, P., 1 Jan 2011, In: *Nature Protocols*. 6, 4, p. 509-522 14 p.

Confronting cellular heterogeneity in studies of protein metabolism and homeostasis in aging research

Boisen, L. & Kristensen, P., 1 Dec 2010, *Protein Metabolism and Homeostasis in Aging*. p. 234-244 11 p. (Advances in Experimental Medicine and Biology, Vol. 694).

Somatic point mutations in mtDNA control region are influenced by genetic background and associated with healthy aging: a GEHA study

Rose, G., Romeo, G., Dato, S., Crocco, P., Bruni, A. C., Hervonen, A., Majamaa, K., Sevini, F., Franceschi, C., Passarino, G., Consortium, GE. O. H. A. P., Kristensen, P. & Bolund, L., 14 Oct 2010, In: *P L o S One*.

Evaluation of endothelial cell culture as a model system of vascular ageing

Boisen, L., Drasbek, K. R., Pedersen, A. S. & Kristensen, P., 1 Oct 2010, In: *Experimental Gerontology*. 45, 10, p. 779-787 9 p.

Microselection - affinity selecting antibodies against a single rare cell in a heterogeneous population

Sørensen, M. D., Agerholm, I. E., Christensen, B., Kølvråa, S. & Kristensen, P., 1 Jul 2010, In: *Journal of Cellular and Molecular Medicine*. 14, 7, p. 1953-1961 9 p.

The activity of the proteasome during the lifespan of *Caenorhabditis elegans* and its relation to longevity

Larsen, S. A., Olsen, A., Gems, D., Drasbek, K. R. & Kristensen, P., 2010. 1 p.

Epsilon haemoglobin specific antibodies with applications in noninvasive prenatal diagnosis

Sørensen, M. D., Gonzalez Dosal, R., Jensen, K. B., Christensen, B., Kølvrå, S., Jensen, U. B. & Kristensen, P., 24 Aug 2009, In: *Journal of Biomedicine and Biotechnology*. 2009, 659219.

VECTOR FOR SCREENING ANTIBODY

Kawakami, M., Ueda, H., Ihara, M., Kojima, M. & Kristensen, P., 20 Aug 2009, IPC No. C12N 15/ 62 A I, Patent No. WO2009102080, Priority date 14 Feb 2008, Priority No. JP20080032941

SELECTION SYSTEM

Reichmann, L., Kristensen, P., Jestin, J-L. & Winter Gregory, P., 13 Aug 2009, IPC No. C40B 40/ 02 A I, Patent No. US2009203542, Priority date 7 Oct 2008, Priority No. US20080246741

A compact phage display human scFv library for selection of antibodies to a wide variety of antigens

Pansri, P., Jaruseranee, N., Rangnoi, K., Kristensen, P. & Yamabhai, M., 29 Jan 2009, In: *BMC Biotechnology*. 9, 6.

Homeotic modulation of differentiation of normal human epidermal keratinocytes undergoing replicative senescence in vitro

Berge, U., Kristensen, P. & Rattan, S. I. S., 1 Jul 2008, In: *Experimental Gerontology*. 43, 7, p. 658-662 5 p.

Inhibition of the proteolytic activity of pregnancy-associated plasma protein-A by targeting substrate exosite binding

Mikkelsen, J. H., Gyruup, C., Kristensen, P., Overgaard, M. T., Poulsen, C. B., Laursen, L. S. & Oxvig, C., 13 Jun 2008, In: *Journal of Biological Chemistry*. 283, 24, p. 16772-16780 9 p.

PHAGE-DISPLAY SYSTEM FOR THE SELECTION OF CORRECTLY FOLDED PROTEINS

Lutz, R., Peter, K., Jean-Luc, J. & Gregory Paul, W., 17 Mar 2008, IPC No. C40B 40/ 02 A I, Patent No. PT1078051E, Priority date 13 May 1998, Priority No. GB19980010228

Open Sandwich ELISA Libraries

Kristensen, P., Ueda, H., Kojima, M., Ihara, M. & Kawakami, M., 2008, Patent No. JP2008-032941

Unspecific uptake of M13-type bacteriophage into human endothelial cell lines

Mandrup, O. A. & Kristensen, P., 2008.

Genetics of healthy aging in Europe: The EU-integrated project GEHA (GEnetics of Healthy Aging)

Franceschi, C., Bezrukov, V., Blanché, H., Bolund, L., Christensen, K., De Benedictis, G., Deiana, L., Gonos, E., Hervoonen, A., Yang, H., Jeune, B., Kirkwood, T. B. L., Kristensen, P., Leon, A., Pelicci, P. G., Pelttonen, L., Poulain, M., Rea, I. M., Remacle, J., Robine, J. M. & 7 others, Schreiber, S., Sikora, E., Slagboom, P. E., Spazzafumo, L., Stazi, M. A., Toussaint, O. & Vaupel, J. W., 1 Jan 2007, *Biogerontology: Mechanisms and Interventions*. Wiley-Blackwell, p. 21-45 25 p. (Annals of the New York Academy of Sciences, Vol. 1100).

Ageing and Angiogenesis

Boisen, L., Rattan, S. I. S. & Kristensen, P., 2007.

CHARACTERISATION OF PROTEASOME GLYCATION DURING AGEING USING PHAGE DISPLAYED ANTIBODIES

Drasbek, K. R., Sejersen, H., Gonzalez-Dosal, R. & Kristensen, P., 2007.

Detection of foetal cells from maternal blood

Kristensen, P., Dræby Sørensen, M., Kølvrå, S., Christensen, B. & Schelde, P., 2007, Patent No. WO/2007/065438

Inhibition of tumor angiogenesis using scFv antibodies

Cech, A. R., Dræby Sørensen, M. & Kristensen, P., 2007.

Modulation of Angiogenesis by Heat Shock in Mortal and Immortal Human Endothelial Cells

Luo, W., Kristensen, P. & Rattan, S. I. S., 2007.

Phage Antibody Technology Applied to identify New Molecular Targets on Ln-5 Positive Malignant Cells

Sang, L., Galsgaard, E., Mathiasen, I. S. & Kristensen, P., 2007.

Enhancement of DNA vaccine potency through linkage of antigen to filamentous bacteriophage coat protein III domain I

Cuesta, Á. M., Suárez, E., Larsen, M., Jensen, K. B., Sanz, L., Compte, M., Kristensen, P. & Álvarez-Vallina, L., 1 Apr 2006, In: *Immunology*. 117, 4, p. 502-506 5 p.

POLYPEPTIDE

Kristensen, P., 9 Feb 2006, IPC No. C07K 14/ 47 A I, Patent No. WO2006013468, Priority date 26 Jul 2004, Priority No. GB20040016651

Polypeptide

Peter, K., 9 Feb 2006, IPC No. C07K 14/ 47 A I, Patent No. AU2005268501, Priority date 26 Jul 2005, Priority No. WO20051B02530

Identification of genes involved in healthy aging and longevity

Weibel, J., Dræby Sørensen, M. & Kristensen, P., 1 Jan 2006, In: *Annals of the New York Academy of Sciences*. 1067, 1, p. 317-322 6 p.

Kinetin-induced differentiation of normal human keratinocytes undergoing aging in vitro

Berge, U., Kristensen, P. & Rattan, S. I. S., 1 Jan 2006, In: *Annals of the New York Academy of Sciences*. 1067, 1, p. 332-336 5 p.

Phage-displayed antibodies for the detection of glycosylated proteasome in aging cells

Gonzalez-Dosal, R., Sørensen, M. D., Clark, B. F. C., Rattan, S. I. S. & Kristensen, P., 1 Jan 2006, In: *Annals of the New York Academy of Sciences*. 1067, 1, p. 474-478 5 p.

Severe acute respiratory syndrome (SARS): Development of diagnostics and antivirals

Sørensen, M. D., Sørensen, B., Gonzalez-Dosal, R., Melchjorsen, C. J., Weibel, J., Wang, J., Jun, C. W., Huanming, Y. & Kristensen, P., 1 Jan 2006, In: *Annals of the New York Academy of Sciences*. 1067, 1, p. 500-505 6 p.

Understanding and modulating aging

Rattan, S. I. S., Kristensen, P. & Clark, B. F. C., 1 Jan 2006, In: *Annals of the New York Academy of Sciences*. 1067, 1

Multivalent display system on filamentous bacteriophage pVII minor coat protein

Kwaśnikowski, P., Kristensen, P. & Markiewicz, W. T., 20 Dec 2005, In: *Journal of Immunological Methods*. 307, 1-2, p. 135-143 9 p.

Isolation of recombinant phage-displayed antibodies recognizing skin keratinocytes.

Jensen, K. B. & Kristensen, P., 14 Mar 2005, In: *Methods in molecular biology (Clifton, N.J.)*. 289, p. 359-370 12 p.

Multivalent antibody fragments toward the tumor-associated core-1 disaccharide generated by phage display of multimeric scFv repertoires

Danielczyk, A., Kristensen, P., Karsten, U. & Goletz, S., 2005, In: *Plant Molecular Biology*.

Isolation of high-affinity human IgE and IgG antibodies recognising Bet v 1 and *Humicola lanuginosa* lipase from combinatorial phage libraries

Jakobsen, C. G., Bodtger, U., Kristensen, P., Poulsen, L. K. & Roggen, E. L., 1 Aug 2004, In: *Molecular Immunology*. 41, 10, p. 941-953 13 p.

Stabilization of antibody V_H-domains by proteolytic selection

Ueda, H., Kristensen, P. & Winter, G., 1 Jun 2004, In: Journal of Molecular Catalysis B: Enzymatic. 28, 4-6, p. 173-179 7 p.

ACTIVE FUSION PROTEINS AND METHOD FOR THE PRODUCTION THEREOF

Steffen, G., Martin, L., Peter, A. C., Kim, B. J., Peter, K., Kim Bak, J. & Peter Astrup, C., 11 Mar 2004, IPC No. C12N 15/ 62 A I, Patent No. AU2003264075, Priority date 20 Aug 2003, Priority No. WO2003EP09216

ACTIVE FUSION PROTEINS AND METHOD FOR THE PRODUCTION THEREOF

Goletz, S., Larsen, M., Christensen, Peter, A., Jensen, Kim, B. & Kristensen, P., 4 Mar 2004, IPC No. C12N 15/ 62 A I, Patent No. WO2004018685, Priority date 20 Aug 2002, Priority No. DE2002138846

Isolation of high-affinity human IgE and IgG antibodies recognising Bet v 1 and H. lanuginosa lipase from combinatorial phage libraries

Jakobsen, C. G., Bodtger, U., Kristensen, P., Poulsen, L. K. & Roggen, E. L., 2004, In: Mol. Immun..

Isolation of phage display antibodies recognising epidermal skin keratinocyte

Jensen, K. B. & Kristensen, P., 2004, In: Meth. Mol. Biol.. 289, p. 359-370 12 p.

A novel cell binding site in the coiled-coil domain of laminin involved in capillary morphogenesis

Sanz, L., García-Bermejo, L., Blanco, F. J., Kristensen, P., Feijóo, M., Suárez, E., Blanco, B. & Álvarez-Vallina, L., 1 Apr 2003, In: EMBO Journal. 22, 7, p. 1508-1517 10 p.

SELECTION SYSTEM FOR PHAGEMIDS USING PROTEOLYTICALLY SENSITIVE HELPER PHAGE

Lutz, R., Peter, K., Jean-Luc, J., Gregory Paul, W., Lutz *, R., Peter *, K., Jean-Luc *, J. & Gregory Paul *, W., 26 Mar 2003, IPC No. C40B 40/ 02 A I, Patent No. GB2379933, Priority date 13 May 1999, Priority No. GB20000026143

Identification of keratinocyte-specific markers using phage display and mass spectrometry.

Jensen, K. B., Jensen, O. N., Ravn, P., Clark, B. F. C. & Kristensen, P., 1 Jan 2003, In: Molecular & cellular proteomics : MCP. 2, 2, p. 61-69 9 p.

Generation and characterization of recombinant human antibodies specific for native laminin epitopes: Potential application in cancer therapy

Sanz, L., Kristensen, P., Russell, S. J., Ramirez García, J. & Álvarez-Vallina, L., 1 Dec 2001, In: Cancer Immunology, Immunotherapy. 50, 10, p. 557-565 9 p.

Selection system

Lutz *, R., Peter *, K., Jean-Luc *, J. & Gregory Paul *, W., 17 Oct 2001, IPC No. C40B 40/ 02 A I, Patent No. GB2361237, Priority date 13 May 1999, Priority No. WO1999GB01526

Method for the isolation of large variances of specific molecules for a target molecule from phagemid gene libraries, and a test kit

Goletz, S., Christensen, P. A. & Kristensen, P., 2001, Patent No. US2004214242

Applying phage display technology in aging research

Kristensen, P., Ravn, P., Jensen, K. B. & Jensen, K., 1 Dec 2000, In: Biogerontology. 1, 1, p. 67-78 12 p.

Identification of phage antibodies toward the Werner protein by selection on Western blots

Ravn, P., Kjær, S., Jensen, K. H., Wind, T., Jensen, K. B., Kristensen, P., Brosh, R. M., Orren, D. K., Bohr, V. A. & Clark, B. F. C., 8 Mar 2000, In: Electrophoresis. 21, 3, p. 509-516 8 p.

A method for the selection of catalytic activity using the proximity effect

Jestin, J-L., Kristensen, P. & Winter, G., 2000, In: Angew. Chim. Int. Ed..

Eine Methode zur Selektion katalytischer Aktivität, die Phagendisplay und Nachbarschaftseffekte nutzt

Jestin, J.-L., Kristensen, P. & Winter, G., 2000, In: Angew. Chim. Int. Ed..

Selection system

Lutz, R., Peter, K., Jean-Luc, J. & Gregory Paul, W., 29 Nov 1999, IPC No. C40B 40/ 02 A I, Patent No. AU3941399, Priority date 13 May 1999, Priority No. WO1999GB01526

SELECTION SYSTEM

Riechmann, L., Kristensen, P., Jestin, J.-L. & Winter, Gregory, P., 18 Nov 1999, IPC No. C40B 40/ 02 A I, Patent No. WO9958655, Priority date 13 May 1998, Priority No. GB19980010223

A method for the selection of catalytic activity using phage display and proximity coupling

Jestin, J. L., Kristensen, P. & Winter, G., 19 Apr 1999, In: Angewandte Chemie - International Edition. 38, 8, p. 1124-1127 4 p.

Purification and characterisation of a tissue specific elongation factor 1 alpha (EF-1 α 2) from rabbit muscle

Kristensen, P., Lund, A., Clark, B. F. C., Cavallius, J. & Merrick, W. C., 28 Apr 1998, In: Biochemical and Biophysical Research Communications. 245, 3, p. 810-814 5 p.

The elongation factor 1 A-2 isoform from rabbit: Cloning of the cDNA and characterization of the protein

Kahns, S., Lund, A., Kristensen, P., Knudsen, C. R., Clark, B. F. C., Cavallius, J. & Merrick, W. C., 15 Apr 1998, In: Nucleic Acids Research. 26, 8, p. 1884-1890 7 p.

Proteolytic selection for protein folding using filamentous bacteriophages

Kristensen, P. & Winter, G., 1 Jan 1998, In: Folding and Design. 3, 5, p. 321-328 8 p.

Proteolytic selection for folding using filamentous bacteriophages

Kristensen, P. & Winter, G., 1998, In: Structure. 3, p. 321-328 8 p.

Normal levels of the vitamin D receptor and its message in psoriatic skin

Sølvsten, H., Fogh, R., Svendsen, M., Kristensen, P., Aström, A., Kumar, R. & Kragballe, K., 1 Dec 1996, In: Journal of Investigative Dermatology Symposium Proceedings. 1, 1, p. 28-32 5 p.

A model phage display subtraction method with potential for analysis of differential gene expression

Staubøl-Grøn, B., Wind, T., Kjær, S., Kahns, L., Hansen, N. J. V., Kristensen, P. & Clark, B. F. C., 5 Aug 1996, In: FEBS Letters. 391, 1-2, p. 71-75 5 p.

An approach towards the isolation of antibodies specific for differentiated cultured keratinocytes from phage display antibody libraries

Staubøl-Grøn, B., Wind, T., Kjær, S., Kragballe, K. & Kristensen, P., 1996, In: J. Invest. Dermatol..

A fast, economical and efficient method for DNA purification by use of a homemade bead column

Hansen, N. J. V., Kristensen, P., Lykke, J., Mortensen, K. K. & Clark, B. F. C., 1 Dec 1995, In: Biochemistry and Molecular Biology International. 35, 3, p. 461-465 5 p.

Purification and characterization of leukotriene A₄ hydrolase from human epidermis

Iversen, L., Kristensen, P., Nissen, J. B., Merrick, W. C. & Kragballe, K., 30 Jan 1995, In: FEBS Letters. 358, 3, p. 316-322 7 p.

Human epidermis transforms exogenous leukotriene A₄ into peptide leukotrienes: possible role in transcellular metabolism

Iversen, L., Kristensen, P., Grøn, B., Ziboh, V. A. & Kragballe, K., 1 May 1994, In: Archives of Dermatological Research. 286, 5, p. 261-267 7 p.

Aging, differentiation and apoptosis in human epidermal keratinocytes in culture

Norsgaard, H., Glenting, M., Kristensen, P., Clark, B. F. C. & Rattan, S. I. S., 1 Jan 1994, In: Archives of Gerontology and Geriatrics. 19, SUPPL. 1, p. 185-196 12 p.

Vitiligo [1]

Falabella, R., Olsson, M. J., Juhlin, L., Zachariae, H. & Kristensen, P., 1 Jan 1994, In: Acta Dermato-Venereologica. 74, 2, p. 147-148 2 p.

Vitiligo - Reply

Zachariae, H. & Kristensen, P., 1994, In: Acta Dermato Venereologica.

Autotransplantation in vitiligo: Treatment with epidermal grafts and cultured melanocytes

Zachariae, H., Zachariae, C., Deleuran, B. & Kristensen, P., 1 Jan 1993, In: Acta Dermato-Venereologica. 73, 1, p. 46-48 3 p.

Leukotriene B₄ formation during human neutrophil keratinocyte interactions: Evidence for transformation of leukotriene A₄ by putative keratinocyte leukotriene A₄ hydrolase

Iversen, L., Fogh, K., Ziboh, V. A., Kristensen, P., Schmedes, A. & Kragballe, K., 1 Jan 1993, In: Journal of Investigative Dermatology. 100, 3, p. 293-298 6 p.