

TRADEMARK ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

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|-----------------------|-------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | SECURITY INTEREST |

CONVEYING PARTY DATA

| Name | Formerly | Execution Date | Entity Type |
|--------------------------|----------|----------------|-----------------------|
| ActivX Biosciences, Inc. | | 01/09/2004 | CORPORATION: DELAWARE |

RECEIVING PARTY DATA

| | |
|-------------------|-------------------------------|
| Name: | Frazier Healthcare III, L.P. |
| Street Address: | 2 Union Sq. Bldg., Suite 3200 |
| Internal Address: | 601 Union Street |
| City: | Seattle |
| State/Country: | WASHINGTON |
| Postal Code: | 98012 |
| Entity Type: | LIMITED PARTNERSHIP: DELAWARE |

| | |
|-------------------|-------------------------------|
| Name: | Frazier Affiliates III, L.P. |
| Street Address: | 2 Union Sq. Bldg., Suite 3200 |
| Internal Address: | 601 Union Street |
| City: | Seattle |
| State/Country: | WASHINGTON |
| Postal Code: | 98012 |
| Entity Type: | LIMITED PARTNERSHIP: DELAWARE |

| | |
|-----------------|-------------------------------|
| Name: | ProQuest Investments, L.P. |
| Street Address: | 600 Alexander Park, Suite 204 |
| City: | Princeton |
| State/Country: | NEW JERSEY |
| Postal Code: | 08540 |
| Entity Type: | LIMITED PARTNERSHIP: DELAWARE |

| | |
|-----------------|-------------------------------|
| Name: | ProQuest Companion Fund, L.P. |
| Street Address: | 600 Alexander Park, Suite 204 |
| City: | Princeton |
| State/Country: | NEW JERSEY |

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| | |
|--------------|-------------------------------|
| Postal Code: | 08540 |
| Entity Type: | LIMITED PARTNERSHIP: DELAWARE |

| | |
|-----------------|------------------------------------|
| Name: | Oxford Bioscience Partners IV L.P. |
| Street Address: | 222 Berkeley Street, Suite 1650 |
| City: | Boston |
| State/Country: | MASSACHUSETTS |
| Postal Code: | 02478 |
| Entity Type: | LIMITED PARTNERSHIP: DELAWARE |

| | |
|-----------------|---------------------------------|
| Name: | mRNA Fund II L.P. |
| Street Address: | 222 Berkeley Street, Suite 1650 |
| City: | Boston |
| State/Country: | MASSACHUSETTS |
| Postal Code: | 02478 |
| Entity Type: | LIMITED PARTNERSHIP: DELAWARE |

| | |
|-----------------|--|
| Name: | Paul Schimmel, Trustee FBO The Paul Schimmel PS Plan |
| Street Address: | 4350 La Jolla Village Drive, Suite 1000 |
| City: | San Diego |
| State/Country: | CALIFORNIA |
| Postal Code: | 92122-1247 |
| Entity Type: | Trust: |

| | |
|-----------------|------------------|
| Name: | Novo A/S |
| Street Address: | Krogshoejvej 41 |
| City: | Bagsvaerd |
| State/Country: | DENMARK |
| Postal Code: | DK 2880 |
| Entity Type: | COMPANY: DENMARK |

PROPERTY NUMBERS Total: 2

| Property Type | Number | Word Mark |
|----------------------|---------|----------------------|
| Registration Number: | 2792590 | XSITE |
| Registration Number: | 2536277 | PRECISION PROTEOMICS |

CORRESPONDENCE DATA

Fax Number: (858)550-6420

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (858) 550-6000
Email: trademarks@cooley.com
Correspondent Name: Kent M. Walker, Esq./Cooley Godward LLP
Address Line 1: 4401 Eastgate Mall
Address Line 4: San Diego, CALIFORNIA 92121-1909

DOMESTIC REPRESENTATIVE

Name:
Address Line 1:
Address Line 2:
Address Line 3:
Address Line 4:

NAME OF SUBMITTER:

Kent M. Walker, Esq.

Total Attachments: 11

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ACTIVX BIOSCIENCES, INC.

INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT dated as of January 9, 2004 (the "*Agreement*"), is made by and among ACTIVX BIOSCIENCES, INC., a Delaware corporation ("*Debtor*"), and the lenders listed on Exhibit A hereto (each, a "*Lender*" and collectively, the "*Lenders*"). All capitalized terms used but not otherwise defined herein shall have the respective meanings assigned to them in the Security Agreement (as defined below).

RECITALS

WHEREAS, each Lender has agreed to make certain advances of money and to extend certain financial accommodation to Debtor, as evidenced by the Secured Convertible Promissory Notes (each, a "*Note*" and collectively, the "*Notes*") to be issued pursuant to the Note and Warrant Purchase Agreement of even date herewith by and among Debtor and the Lenders (the "*Purchase Agreement*"), such advances and financial accommodation being referred to herein as the "*Loans*";

WHEREAS, the Lenders are willing to make the Loans to Debtor, but only upon the condition, among others, that Debtor shall have executed this Agreement; and

WHEREAS, pursuant to the terms of that certain Security Agreement, dated of even date herewith, by and among Debtor and the Lenders (as the same may be amended, modified or supplemented from time to time, the "*Security Agreement*"), Debtor has granted the Lenders a security interest in all of Debtor's right, title and interest in, to or under all of Debtor's assets.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of all of the Secured Obligations, Debtor hereby represents, warrants, covenants and agrees as follows:

To secure all of the Secured Obligations, Debtor grants and pledges to the Lenders a security interest in all of Debtor's right, title and interest in, to and under its Intellectual Property, whether presently existing or hereafter acquired or created (including without limitation those Copyrights, Patents and Trademarks listed on Exhibits B, C and D hereto), all of the goodwill of the business connected with the use of, and symbolized by, each such Copyright, Patent and/or Trademark and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements or dilution or injury to the goodwill associated therewith, all rights corresponding thereto throughout the world and all re-issues, divisions, continuations, renewals, extensions and continuations-in-part thereof (collectively, the "*Intellectual Property Collateral*"); provided that the grant and pledge of a security interest as provided herein shall not extend to any Excluded Collateral.

This security interest is granted in conjunction with the security interest granted to the Lenders under the Security Agreement. The rights and remedies of the Lenders with respect to the

security interest granted hereby are subject to the terms of the Security Agreement and are in addition to those set forth in the Security Agreement and the other Loan Documents (as defined in the Purchase Agreement), the terms and provisions of which are incorporated by reference herein as if fully set forth herein and those which are now or hereafter available to the Lenders as a matter of law or equity. Each right, power and remedy of the Lenders provided for herein or in the Security Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by the Lenders of any one or more of the rights, powers or remedies provided for in this Agreement, the Security Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including the Lender in accordance with the Loan Documents, of any or all other rights, powers or remedies.

Debtor represents and warrants that **Exhibits B, C and D** attached hereto set forth any and all intellectual property rights in connection to which Debtor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable, other than rights in Excluded Collateral.

In all respects, including all matters of construction, validity and performance, this Agreement and the Secured Obligations arising hereunder shall be governed by, and construed and enforced in accordance with, the laws of the State of California applicable to contracts made and performed in such state, without regard to the principles thereof regarding conflict of laws, except to the extent that the UCC provides for the application of the law of Debtor's state of incorporation.

Notwithstanding anything to the contrary herein, any party who shall become an Investor at an Additional Closing pursuant to the Purchase Agreement may become a party to this Agreement by executing and delivering a counterpart signature page to this Agreement and shall be deemed a "Lender" hereunder. This Agreement, including without limitation, the Schedule of Lenders set forth in Exhibit A, may be amended by Debtor without the consent of the Lenders to include any Additional Investors and to reflect the Notes issued thereto.

[Signature pages follow.]

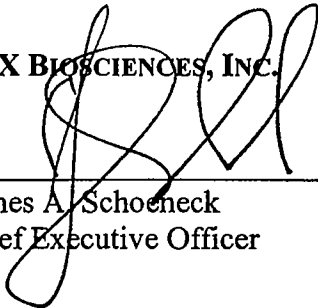
IN WITNESS WHEREOF, the parties have caused this INTELLECTUAL PROPERTY SECURITY AGREEMENT to be duly executed by its officers thereunto duly authorized as of the first date written above.

DEBTOR:

ADDRESS OF DEBTOR:

11025 North Torrey Pines Road
La Jolla, CA 92037
Attn: James A. Schoeneck
Fax: (858) 587-4878

ACTIVX BIOSCIENCES, INC.

By: 
James A. Schoeneck
Chief Executive Officer

TAXPAYER IDENTIFICATION NUMBER OF JURISDICTION OF ORGANIZATION OF DEBTOR:


33-0831285

Delaware

LENDERS:


FRAZIER HEALTHCARE III, L.P.

By: FHM III, L.L.C.
Its: General Partner

By: 
Name: _____
Title: _____

FRAZIER AFFILIATES III, L.P.

By: FHM III, L.L.C.
Its: General Partner

By: 
Name: _____
Title: _____

NOVO A/S

By: _____
Name: _____
Title: _____

OXFORD BIOSCIENCE PARTNERS IV, L.P.

By: _____
Name: _____
Title: _____

MRNA FUND II L.P.

By: OBP Management IV L.P.

By: _____
Name: _____
Title: _____

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

LENDERS:

FRAZIER HEALTHCARE III, L.P.

By: FHM III, L.L.C.
Its: General Partner

By: _____
Name: _____
Title: _____

FRAZIER AFFILIATES III, L.P.

By: FHM III, L.L.C.
Its: General Partner

By: _____
Name: _____
Title: _____

NOVO A/S

By: TDI Jan 6, 2004
Name: THOMAS DYLBURG
Title: PARTNER

OXFORD BIOSCIENCE PARTNERS IV, L.P.

By: _____
Name: _____
Title: _____

MRNA FUND II L.P.

By: OBP Management IV L.P.

By: _____
Name: _____
Title: _____

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

LENDERS:

FRAZIER HEALTHCARE III, L.P.

By: FHM III, L.L.C.
Its: General Partner

By: _____
Name: _____
Title: _____

FRAZIER AFFILIATES III, L.P.

By: FHM III, L.L.C.
Its: General Partner

By: _____
Name: _____
Title: _____

NOVO A/S

By: _____
Name: _____
Title: _____

OXFORD BIOSCIENCE PARTNERS IV, L.P.

By: OBP Management IV L.P.

By: Mark Carthy
Name: Mark Carthy
Title: General Partner


MRNA FUND II L.P.

By: OBP Management IV L.P.

By: Mark Carthy
Name: Mark Carthy
Title: General Partner


PROQUEST INVESTMENTS, L.P.

By: ProQuest Associates LLC
Its: General Partner

By: 
Name: PASQUALE DEANGELIS
Title: CHIEF FINANCIAL OFFICER

PROQUEST COMPANION FUND, L.P.

By: ProQuest Associates LLC
Its: General Partner

By: 
Name: PASQUALE DEANGELIS
Title: CHIEF FINANCIAL OFFICER

PAUL SCHIMMEL

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

PROQUEST INVESTMENTS, L.P.

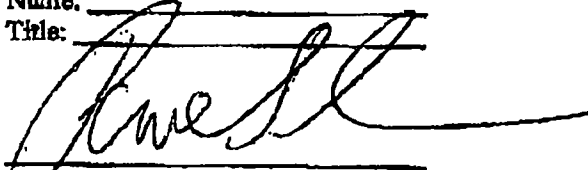
By: ProQuest Associates LLC
Its: General Partner

By: _____
Name: _____
Title: _____

PROQUEST COMPANION FUND, L.P.

By: ProQuest Associates LLC
Its: General Partner

By: _____
Name: _____
Title: _____



PAUL SCHIMMEL, TRUSTEE
FBO THE PAUL SCHIMMEL PS PLAN

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

EXHIBIT A
SCHEDULE OF LENDERS
INITIAL CLOSING: JANUARY 9, 2004

| LENDER NAME AND ADDRESS | LOAN AMOUNT UNDER NOTE |
|--|-------------------------------|
| Frazier Healthcare III, L.P. | \$1,000,000.00 |
| Frazier Affiliates III, L.P. | \$7,522.14 |
| Novo A/S | \$500,000.00 |
| Oxford Bioscience Partners IV, L.P. | \$488,334.94 |
| mRNA Fund II L.P. | \$4,899.63 |
| ProQuest Investments, L.P. | \$996,778.43 |
| ProQuest Companion Fund, L.P. | \$12,924.03 |
| Paul Schimmel, Trustee FBO The Paul Schimmel PS Plan | \$500,000.00 |
| Total Loan Amount: | <hr/> \$3,510,459.17 |

EXHIBIT C**PATENTS**

| Description | Registration/ Application Number | Registration/ Application Date |
|---|---|---|
| Activity Based Probe Analysis | PCT/US02/03808 | 02/05/2002 |
| Activity Based Probe Analysis | 10/049,164 | 02/06/2002 |
| Protein Profiling Platform | 10/087,602 | 03/01/2002 |
| Protein Profiling Platform | PCT/US02/06234 | 03/01/2002 |
| Adenine Nucleotide-Binding Protein-Directed Probes, and Methods of Their Synthesis and Use | 10/213,359 | 08/05/2002 |
| Adenine Nucleotide-Binding Protein-Directed Probes, and Methods of Their Synthesis and Use | PCT/US02/39073 | 12/05/2002 |
| Tethered Activity-Based Probes and Uses Thereof | PCT/US03/07898 | 03/12/2003 |
| Production and Use of Salt Tolerant and Culture Density Tolerant Organisms | PCT/US03/12686 | 04/23/2003 |
| Nucleotide-Binding Protein-Directed Probes and Methods of Their Synthesis and Use | TBA | 10/29/2003 |
| Activity-Based Probes, and Methods of Their Preparation and Use | TBA | 10/08/2003 |
| Macromolecule Identification Made by Mass Spectroscopy and Database Searching | 60/446,960 | 02/11/2003 |
| Acyl-Nucleotide Probes and Methods of Their Synthesis and Use in Proteomic Analysis | 60/459,797 | 04/01/2003 |

EXHIBIT D
TRADEMARKS

| Description | Registration/ Application Number | Registration/ Application Date |
|----------------------|---|---|
| Precision Proteomics | 2,536,277 | 02/05/2002 |
| Xsite | 2,792,590 | 12/09/2003 |