

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT2570633

SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>ALEXANDER G. PLETNEV</td> <td>06/07/2010</td> </tr> <tr> <td>BRIAN R. MURPHY</td> <td>06/07/2010</td> </tr> <tr> <td>AMBER R. ENGEL</td> <td>06/07/2010</td> </tr> </tbody> </table>		Name	Execution Date	ALEXANDER G. PLETNEV	06/07/2010	BRIAN R. MURPHY	06/07/2010	AMBER R. ENGEL	06/07/2010
Name	Execution Date								
ALEXANDER G. PLETNEV	06/07/2010								
BRIAN R. MURPHY	06/07/2010								
AMBER R. ENGEL	06/07/2010								
RECEIVING PARTY DATA									
Name:	THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES								
Street Address:	6011 EXECUTIVE BOULEVARD, SUITE 325, MSC 7660								
Internal Address:	OFFICE OF TECHNOLOGY TRANSFER, NATIONAL INSTITUTES OF HEALTH								
City:	BETHESDA								
State/Country:	MARYLAND								
Postal Code:	20892-7660								
PROPERTY NUMBERS Total: 1									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14014920</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14014920				
Property Type	Number								
Application Number:	14014920								
CORRESPONDENCE DATA									
Fax Number:	(503)595-5301								
Phone:	503-595-5300								
Email:	susan.graf@klarquist.com								
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>									
Correspondent Name:	SUSAN W. GRAF, KLARQUIST SPARKMAN, LLP								
Address Line 1:	121 SW SALMON STREET								
Address Line 2:	SUITE 1600								
Address Line 4:	PORTLAND, OREGON 97204								
ATTORNEY DOCKET NUMBER:	4239-82554-05								
NAME OF SUBMITTER:	SUSAN W. GRAF, PH.D.								

Signature:	/Susan W. Graf/
Date:	10/08/2013
Total Attachments: 3 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif	

**ASSIGNMENT FOR NIH/FDA INVENTIONS
(NIH OR FDA CO-INVENTORS ONLY)**

WHEREAS, we, Alexander G. Pletnev, Brian R. Murphy, and Amber R. Engel [hereinafter **The Inventors**], employees of the National Institutes of Health, a component of the United States Department of Health and Human Services having an address at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660, have made certain inventions as described and claimed in:

U.S. Provisional Patent Application No. 61/181,982, filed on May 28, 2009, entitled "ANTIGENIC CHIMERIC TICK-BORNE ENCEPHALITIS VIRUS/DENGUE VIRUS TYPE 4 RECOMBINANT VIRUSES," and

PCT Patent Application No. PCT/US2010/036678, filed on May 28, 2010, entitled "ANTIGENIC CHIMERIC TICK-BORNE ENCEPHALITIS VIRUS/DENGUE VIRUS TYPE 4 RECOMBINANT VIRUSES."

both of which applications are collectively referred to herein as "the Applications"; and

WHEREAS, we are the applicant(s) named in the above-identified Applications; and

WHEREAS, the inventions described and claimed therein were made under conditions such as to entitle **THE UNITED STATES OF AMERICA, as represented by the Secretary, Department of Health and Human Services** [hereinafter **THE GOVERNMENT**] under Executive Order 10096 and its amendments, 35 U.S.C. §§200-201, §§206-207, and §210 and 37 C.F.R. Part 501 to the entire right, title, and interest in such inventions; and

WHEREAS, THE GOVERNMENT is desirous of acquiring all domestic and foreign right, title, and interest in the inventions described and claimed in the Applications;

NOW, THEREFORE, having the legal obligation to assign our right, title and interest in the inventions described and claimed in the above-identified Patent Applications to **THE GOVERNMENT**, having a place of business at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660 and for consideration, the receipt and sufficiency of which are hereby acknowledged, we hereby assign and transfer to **THE GOVERNMENT**:

the entire right, title, and interest in and to any and all inventions described and claimed in said Applications and any and all Letters Patent which may be granted thereon, and any and all continuations, divisions, reissues or extensions thereof; and

all rights to claim priority on the basis of said Applications including but not limited to applications filed through the provisions of the Patent Cooperation Treaty ("PCT Applications"); and

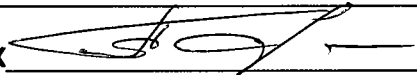
all applications for Letters Patent that may be filed for any and all inventions described and claimed in said Applications that may be filed in any foreign country and all Letters Patents that may be granted thereon in any foreign country and all extensions, renewals, and reissues thereof; and


any and all such Letters Patents as may be granted in the United States or any foreign country to be held by **THE GOVERNMENT** to the end of the term for which the same would

have been held by **The Inventors** had this assignment not been made.

We further agree to make, execute, and deliver to **THE GOVERNMENT**, upon request, any and all papers, documents, affidavits, or other instruments that may be necessary in the prosecution of any application or applications for improvements or reissues of Letters Patent, and to assist **THE GOVERNMENT** in every way as may be requested in protecting said invention. **THE GOVERNMENT** promises to pay any reasonable expenses incurred by **The Inventors** in making, executing and delivering of such papers to **THE GOVERNMENT**.

IN WITNESS WHEREOF we subscribe our hands and seals on the dates shown below:

Inventor Alexander G. Pletnev	
Date <u>6/7/10</u>	X <u></u> Signature
County of	<u>Montgomery</u>
State of	<u>MD</u>
Subscribed and sworn to before me this	<u>7</u> day of <u>June</u> , <u>2010</u> .
Seal <u>Ronni Fein</u>	Notary Public for <u>NIH</u> My Commission Expires: <u>9/30/2011</u>

Inventor Brian R. Murphy	
Date <u>6/7/10</u>	X <u></u> Signature
County of	<u>Montgomery</u>
State of	<u>MD</u>
Subscribed and sworn to before me this	<u>7</u> day of <u>June</u> , <u>2010</u> .
Seal <u>Ronni Fein</u>	Notary Public for <u>NIH</u> My Commission Expires: <u>9/30/2011</u>

Inventor Amber R. Engel	
Date <u>6/7/10</u>	x <u>Amber Engel</u> Signature
County of	<u>Montgomery</u>
State of	<u>MD</u>
Subscribed and sworn to before me this	<u>7</u> day of <u>June</u> , <u>2010</u> .
Seal <u>Ronni Feun</u>	Notary Public for <u>NIH</u> My Commission Expires: <u>9/30/2011</u>