PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DATA				
Name Execution Date			Execution Date	
Steve Bartz			08/09/2011	
Duncan Brown			08/09/2011	
Michael Robinson			08/09/2011	
RECEIVING PARTY DATA				
Name:	Name: Merck Sharp & Dohme Corp.			
Street Address:	126 East Lincoln Avenue			
City:	Rahway			
State/Country:	NEW JERSEY			
Postal Code:	07065			
PROPERTY NUMBERS Total: 1				
Property Type		Number		
Application Number. 1381		152		
Application Number: 13817152 CORRESPONDENCE DATA CORRESPONDENCE DATA				
Fax Number: 7325944720 Correspondence will be sent via US Mail when the fax attempt is unsuccessful. E				
Correspondence will be sent via US Mail when the fax attempt is unsuccessful. Phone: 732-594-1932 Phone: 0 0 Email: us_efs@merck.com 0				
Email: us_efs@merck.com				
∟111a11.	Correspondent Name: Morek			
	Merck			
Correspondent Name: Address Line 1:	126 East Linc	oln Avenue		
Correspondent Name: Address Line 1: Address Line 2:	126 East Linc RY 86-2011A			
Correspondent Name: Address Line 1:	126 East Linc RY 86-2011A	oln Avenue V JERSEY 07065		
Correspondent Name: Address Line 1: Address Line 2:	126 East Linc RY 86-2011A Rahway, NEV			
Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	126 East Linc RY 86-2011A Rahway, NEV UMBER:	/ JERSEY 07065		

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

(1) Steve Bartz, located at San Francisco. CA

(2) Duncan Brown, located at San Francisco, CA

(3) Michael Robinson, located at San Francisco, CA

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

RNA Interference Mediated Inhibition of Hepatitis B Virus (HBV) Gene Expression Using Short Interfering Nucleic Acid (siNA)

and/or in the following application(s):

U.S. Provisional Application No. 61/374,555 filed on August 17, 2010

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter **ASSIGNEE**), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said **ASSIGNEE** my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of **ASSIGNEE**, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said **ASSIGNEE**, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of **ASSIGNEE**, without further compensation or charge to said **ASSIGNEE**, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of **ASSIGNEE**, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize **ASSIGNEE** to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Computer Generated Template "Assignment-Merck Sharp & Dohme. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2010

PATENT REEL: 029817 FRAME: 0345

Attorney Docket No.: SIR-IFD-00001

tugu day of Executed this 2011. e Bartz

ACKNOWLEDGEMENT

State of California

County of San Francisco

9, 2011 ____, before me, EVA A. Santava On Bartz eve personally appeared

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within instrument and acknowledged to me that he/she/they executed the same in his/her/their authority capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

Notary Public



Page 2 of 4 Computer Generated Template "Assignment-Merck Sharp & Dohme. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2010

PATENT REEL: 029817 FRAME: 0346

Worldwide Assignment

Attorney Docket No.: SIR-IFD-00001

 $day of _/$ 2011. Executed this Brown

ACKNOWLEDGEMENT

State of California

County of San Francisco

August 9,2011, before me, EVa A. Santana. Iv appeared Duncan Brown, On personally appeared _______

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within instrument and acknowledged to me that he/she/they executed the same in his/her/their authority capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

Notary/Public



Page 3 of 4 Computer Generated Template "Assignment-Merck Sharp & Dohme. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2010

> PATENT REEL: 029817 FRAME: 0347

Attorney Docket No.: SIR-IFD-00001

Executed this \underline{qh} day of \underline{August} , 2011. Michael Robinson

ACKNOWLEDGEMENT

State of California County of San Francisco

On <u>August 9,2011</u>, before me, <u>Eva A. Santana</u>. personally appeared <u>Michael Robinson</u>

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within instrument and acknowledged to me that he/she/they executed the same in his/her/their authority capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

Notary Public



Page 4 of 4 Computer Generated Template "Assignment-Merck Sharp & Dohme. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2010

PATENT REEL: 029817 FRAME: 0348

RECORDED: 02/15/2013