502671876 02/07/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2718483

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | CHANGE OF NAME |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------------------|----------------|
| LIGOCYTE PHARMACEUTICALS, INC. | 03/04/2013 |

RECEIVING PARTY DATA

| Name: | TAKEDA VACCINES (MONTANTA), INC. |
|-----------------|----------------------------------|
| Street Address: | 2155 ANALYSIS DRIVE |
| City: | BOZEMAN |
| State/Country: | MONTANA |
| Postal Code: | 59718 |

PROPERTY NUMBERS Total: 3

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13837653 |
| Application Number: | 13836446 |
| Application Number: | 13837885 |

CORRESPONDENCE DATA

Fax Number: (202)842-7899
Email: mgetts@cooley.com

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

Correspondent Name: MEGHANN T. GETTS

Address Line 1: 1299 PENNSYLVANIA AVENUE, N.W.

Address Line 2: SUITE 700

Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20004

| Oignature. | /Wognam 1. Octo/ |
|-------------------------|--------------------|
| Signature: | /Meghann T. Getts/ |
| NAME OF SUBMITTER: | MEGHANN T. GETTS |
| ATTORNEY DOCKET NUMBER: | LIGO-017 |

PATENT 502671876 REEL: 032179 FRAME: 0490

| Date: | 02/07/2014 |
|--|------------|
| Total Attachments: 2 source=LIGOCYTE_TO_TAKEDA_CHANGEOFNAME#page1.tif source=LIGOCYTE_TO_TAKEDA_CHANGEOFNAME#page2.tif | |

PATENT REEL: 032179 FRAME: 0491

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT

COPY OF THE CERTIFICATE OF AMENDMENT OF "LIGOCYTE

PHARMACEUTICALS, INC.", CHANGING ITS NAME FROM "LIGOCYTE

PHARMACEUTICALS, INC." TO "TAKEDA VACCINES (MONTANA), INC.",

FILED IN THIS OFFICE ON THE FIRST DAY OF MARCH, A.D. 2013, AT

6:47 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

4500744 8100

130267797

You may verify this certificate online at corp.delaware.gov/authver.shtml

Jeffrey W. Bullock, Secretary of State

AUTHENTY CATION: 0254095

DATE: 03-04-13

PATENT REEL: 032179 FRAME: 0492 State of Delaware Secretary of State Division of Corporations Delivered 06:52 PM 03/01/2013 FILED 06:47 PM 03/01/2013 SRV 130267797 - 4500744 FILE

CERTIFICATE OF AMENDMENT TO THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF LIGOCYTE PHARMACEUTICALS, INC.

LigoCyte Pharmaceuticals, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY THAT:

FIRST: The Board of Directors of the Corporation, by unanimous written consent pursuant to Section 141(f) of the General Corporation Law of the State of Delaware, a copy of which has been filed with the minutes of the Corporation, adopted resolutions proposing the following amendment to the Amended and Restated Certificate of Incorporation of the Corporation:

RESOLVED, that the Board of Directors of the Corporation hereby declares it advisable that Article First of the Amended and Restated Certificate of Incorporation of the Corporation be amended to read in its entirety as follows:

"ARTICLE I

The name of the corporation (which is hereinafter referred to as the "Corporation") is Takeda Vaccines (Montana), Inc."

and that the same be and is hereby approved, adopted and ratified.

SECOND: The sole stockholder of the Corporation, by written consent given pursuant to Section 228 of the General Corporation Law of the State of Delaware, a copy of which has been filed with the minutes of the Corporation, adopted the foregoing amendment to the Amended and Restated Certificate of Incorporation of the Corporation.

THIRD: The foregoing amendment has been duly adopted in accordance with the applicable provisions of Section 242 of the General Corporation Law of the State of Delaware.

In Witness Whereof, said Corporation has caused this Certificate to be signed by an authorized officer this 25th day of February, 2013.

LIGOCYTE PHARMACEUTICALS, INC.

Name: Rajeev Venkayya

Title: President

PATENT REEL: 032179 FRAME: 0493

RECORDED: 02/07/2014