

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

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>Vadim Markovtsov</td> <td>01/27/2012</td> </tr> <tr> <td>Yasumichi Hitoshi</td> <td>02/07/2012</td> </tr> </tbody> </table>		Name	Execution Date	Vadim Markovtsov	01/27/2012	Yasumichi Hitoshi	02/07/2012				
Name	Execution Date										
Vadim Markovtsov	01/27/2012										
Yasumichi Hitoshi	02/07/2012										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Rigel Pharmaceuticals, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>1180 Veterans Boulevard</td> </tr> <tr> <td>City:</td> <td>South San Francisco</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>94080</td> </tr> </table>		Name:	Rigel Pharmaceuticals, Inc.	Street Address:	1180 Veterans Boulevard	City:	South San Francisco	State/Country:	CALIFORNIA	Postal Code:	94080
Name:	Rigel Pharmaceuticals, Inc.										
Street Address:	1180 Veterans Boulevard										
City:	South San Francisco										
State/Country:	CALIFORNIA										
Postal Code:	94080										
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>13333817</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13333817						
Property Type	Number										
Application Number:	13333817										
CORRESPONDENCE DATA											
<p>Fax Number: (650)327-3231          Phone: (650) 327-3400          Email: castro@bozpat.com  <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Bozicevic, Field &amp; Francis LLP          Address Line 1: 1900 University Ave.          Address Line 2: Suite 200          Address Line 4: East Palo Alto, CALIFORNIA 94303</p>											
ATTORNEY DOCKET NUMBER:	RIGL-070										
NAME OF SUBMITTER:	James S. Keddie										
Total Attachments: 2 source=RIGL-070_Assgnt-EXECUTED#page1.tif source=RIGL-070_Assgnt-EXECUTED#page2.tif											

OP \$40.00 13333817

## ASSIGNMENT OF PATENT APPLICATION

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

### Whole Blood Assay for Measuring AMPK Activation

(Atty. Docket No. (RIGL-070/P.0270.00.US), (check one)

- ☐ for which I have executed a U.S. patent application on even date herewith. (Accompanying) which  
☒ bears U.S. Application No. 13/333,817, filed on December 21, 2011. (Not Accompanying) which is  
☐ a U.S. provisional application. (Accompanying)

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned inventor, hereby:

- 1) Sell, assign and transfer to Rigel Pharmaceuticals, Inc., a Delaware corporation having a place of business at 1180 Veterans Boulevard, South San Francisco, CA 94080 ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents granted upon (including foreign patents and the right to claim priority), the above-referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all United States Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon the inventor, as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I have not entered and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
- 6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.

Signed on the date indicated beside my signature.

1. Inventor Signature: \_\_\_\_\_

Vadim Markovtsov

Date: \_\_\_\_\_

01/27/2012

State of California ) )

ss.

County of San Mateo ) )

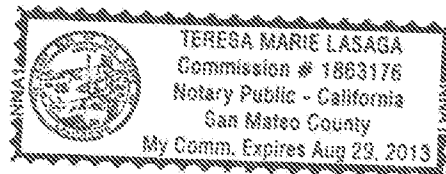
On January 27, 2012 before me, Teresa Marie Lasaga,  
personally appeared Vadim Markovtsov, who proved to me on the basis of satisfactory evidence to be  
the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized 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.

Signature \_\_\_\_\_

*[Handwritten Signature]*



2. Inventor Signature: \_\_\_\_\_

Yasumichi Hitoshi

Date: \_\_\_\_\_

2/7/2012

State of California ) )

ss.

County of San Mateo ) )

On February 07, 2012 before me, Teresa Marie Lasaga,  
personally appeared Yasumichi Hitoshi, who proved to me on the basis of satisfactory evidence to be  
the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized 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.

Signature \_\_\_\_\_

*[Handwritten Signature]*

