SIGNAL GENETICS, INC. Form POS AM November 23, 2015

As filed with the Securities and Exchange Commission on November 20, 2015

Registration No. 333-201533

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-1 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

SIGNAL GENETICS, INC.

(Exact name of registrant as specified in its charter)

Delaware807147-1187261(State or other jurisdiction of incorporation or organization)(Primary Standard Industrial incorporation Code Number)(I.R.S. Employer incorporation No.)

Signal Genetics, Inc. 5740 Fleet Street Carlsbad, California (760) 537-4100

(Address, including zip code, and telephone number, including area code, of registrant's principal executive office)

Samuel D. Riccitelli President and Chief Executive Officer Signal Genetics, Inc. 5740 Fleet Street Carlsbad, California (760) 537-4100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Daniel I. Goldberg, Esq. Cooley LLP 1114 Avenue of the Americas New York, New York 10036 Telephone: (212) 479-6000 Facsimile: (212) 479-6275

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the Securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box: o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act Registration Statement number of the earlier effective Registration Statement for the same offering: o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act Registration Statement number of the earlier effective Registration Statement for the same offering: o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act Registration Statement number of the earlier effective Registration Statement for the same offering: o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o

Non-accelerated filer o (Do not check if smaller reporting company)

Accelerated filer o

Smaller reporting company x

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

DEREGISTRATION OF SECURITIES

This Post-Effective Amendment No. 1 ("Post-Effective Amendment No. 1") is filed by Signal Genetics, Inc. (the "Company"), and amends the registration statement initially filed on Form S-1 (Registration No. 333-201533) with the Securities and Exchange Commission (the "Commission") on January 15, 2015 (as amended, the "Registration Statement"). The Registration Statement registered 3,857,141 shares of common stock, \$0.01 par value per share (the "Common Stock"), including 160,714 shares of common stock issuable upon the exercise of the representative's warrants and 482,142 shares of common stock issuable upon the underwriters' exercise of their over-allotment option in full). The Registration Statement was declared effective on February 17, 2015. The Company files this Post-Effective Amendment No. 1 to the Registration Statement to deregister, as of the effectiveness of this post-effective amendment, the representative's warrants and all shares of Common Stock underlying the representative's warrants. We are deregistering such securities because, as of the effective date hereof, the representative's warrants and the shares of Common Stock issuable upon the exercise of the representative's warrants is being registered under a subsequent registration statement on Form S-3 (Registration No. 333-205618).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Post-Effective Amendment No. 1 to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Carlsbad, State of California, on November 20, 2015.

SIGNAL GENETICS, INC.

By:/s/ Samuel D. Riccitelli Name: Samuel D. Riccitelli

Attorney-in-Fact

Title: President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post-Effective Amendment No. 1 has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Samuel D. Riccitelli Samuel D. Riccitelli	President, Chief Executive Officer and Director (Principal Executive Officer)	November 20, 2015
/s/ Tamara A. Seymour Tamara A. Seymour	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	November 20, 2015
* Bennett S. LeBow	Chairman of the Board of Directors	November 20, 2015
* David A. Gonyer, R. Ph.	Director	November 20, 2015
* Douglas A. Schuling	Director	November 20, 2015
* Robin L. Smith, M.D.	Director	November 20, 2015
* By:/s/ Samuel D. Riccitelli Samuel D. Riccitelli		