Rosetta Genomics Ltd. Form 6-K September 02, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16

UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of September 2014

Commission File Number 001-33042

ROSETTA GENOMICS LTD.

(Translation of registrant's name into English)

10 Plaut Street, Science Park Rehovot 76706, Israel (Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F [Ö] Form 40-F "

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Rosetta Genomics Ltd.

A copy of the notice and proxy statement for the annual general meeting of shareholders of Rosetta Genomics Ltd. to be held on Friday, October 10, 2014 is filed as Exhibit 99.1 hereto and incorporated by reference herein.

Exhibits

Exhibit

Number Description of Exhibit

99.1 Notice and proxy statement relating to the annual general meeting of shareholders of Rosetta Genomics Ltd. to be held on October 10, 2014.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ROSETTA GENOMICS LTD.

Date: September 2, 2014 By:/s/ Oded Biran Oded Biran General Counsel and Secretary