

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

April 18, 2012

**ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

Rosetta Genomics Ltd.

File No. 001-33042 - CF# 28189

Rosetta Genomics Ltd. submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 20-F filed on April 2, 2012.

Based on representations by Rosetta Genomics Ltd. that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibit(s) will not be released to the public for the time period(s) specified:

Exhibit 4.10	through April 2, 2015
Exhibit 4.18	through April 2, 2015

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Michael Seaman
Special Counsel