

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

June 10, 2008

ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES EXCHANGE ACT OF 1934

Helicos BioSciences Corporation
File No. 1-33484 - CF# 21787

Helicos BioSciences Corporation submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-K filed on March 17, 2008.

Based on representations by Helicos BioSciences Corporation 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 10.23 through December 31, 2008

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

Timothy S. Levenberg
Special Counsel