UNITED STATES SECURITIES AND EXCHANGE COMMISSION MARCH 10, 2009

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES ACT OF 1933

Targacept, Inc.

File No. 333-131050- CF#23096

Targacept, Inc. submitted an application under Rule 406 requesting an extension of a prior grant of confidential treatment for information it excluded from the Exhibits to a Form S-1, filed on January 17, 2006, as amended.

Based on representations by Targacept, Inc. 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 exhibits will not be released to the public for the time periods specified:

Exhibit 10.18(b) through January 24, 2014 Exhibit 10.21 through January 24, 2014

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

Daniel Greenspan Special Counsel