

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

June 27, 2013

Via E-mail
Jonathan S. Wolfson
Chief Executive Officer
Solazyme, Inc.
225 Gateway Boulevard
South San Francisco, CA 94080

RE: Solazyme, Inc. Form 10-K for the Year ended December 31, 2012 Filed March 13, 2013 File No. 001-35189

Dear Mr. Wolfson:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien Accounting Branch Chief