



ENZO BIOCHEM, INC.
527 Madison Avenue,
New York, NY 10022

November 2, 2016

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Re: Enzo Biochem, Inc.
Registration Statement on Form S-3/A
File No. 333-213440

VIA EDGAR

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Enzo Biochem, Inc. (the “**Registrant**”) hereby respectfully requests that the effectiveness of the Registration Statement on Form S-3/A (File No. 333-213440) of the Registrant (the “**Registration Statement**”) be accelerated so that it will be declared effective at 4:30 p.m., Eastern Time, on November 3, 2016 or as soon thereafter as may be practicable. As of the date above, there is no managing or principal underwriter for any of the Company’s securities that may be offered pursuant to the Registration Statement. Future managing or principal underwriters, if any, will be identified in a prospectus supplement to the Registration Statement at the time of offering.

The Registrant hereby confirms that it is aware of its responsibilities under the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, as they relate to the proposed offering of the securities specified in the Registration Statement. The Registrant hereby acknowledges that:

- should the Securities and Exchange Commission (the “Commission”) or the staff, acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement;
 - the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
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- the Registrant may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

The undersigned respectfully requests that it be notified of the effectiveness of the Registration Statement by telephone call to our counsel, McDermott Will & Emery LLP, by calling Robert H. Cohen at (212) 547-5885. The Company hereby authorizes Mr. Cohen to orally modify or withdraw this request for acceleration.

Please also provide a copy of the Commission's order declaring the Registration Statement effective to Mr. Cohen via email to rcohen@mwe.com or facsimile to (212) 547-5444 and via mail at 340 Madison Avenue, New York, NY 10173.

Very truly yours,

ENZO BIOCHEM, INC.

By: /s/ Barry W. Weiner
Name: Barry W. Weiner
Title: Chief Financial Officer

cc: Robert H. Cohen (McDermott Will & Emery LLP)
