VIA EDGAR TRANSMISSION

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

Re: Enzo Biochem, Inc. (CIK No. 0000316253)

Form RW With Respect to Withdrawal of Registration Statement on Form S-3ASR (File No. 333-167973)

Ladies and Gentlemen:

Pursuant to Rule 477 under the Securities Act of 1933, as amended (the "Securities Act"), Enzo Biochem, Inc. (the "Company") hereby requests the withdrawal of its Registration Statement on Form S-3ASR (File No. 333-167973), filed with the Securities and Exchange Commission (the "Commission") on July 2, 2010, together with all exhibits thereto (the "Registration Statement").

The Registrant is requesting withdrawal because of a filing error relating to improper EDGAR coding. The Registration Statement should have been filed under code S-3 and was erroneously filed under code S-3ASR. No securities were sold in connection with the offering. Jim Lopez of the Commission has indicated that in order to remedy the filing error, the Company should withdraw the Registration Statement and promptly re-file it under the correct form type. Accordingly, the Registrant intends, after submission of this withdrawal request, to re-file its registration statement under code S-3. The Company respectfully requests that the Commission adjust the filing date of the subsequent filing so as to reflect the intended filing date of July 2, 2010.

In accordance with Rule 457(p) under the Securities Act, the Company requests that all fees paid to the Commission in connection with the initial filing of the Registration Statement be credited to the Registrant's account to be offset against the filing fee for the subsequent filing.

If you have any questions regarding this application for withdrawal, please contact our attorney Robert H. Cohen, Esq.

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Respectfully submitted,

Enzo Biochem, Inc. By: <u>/s/ Barry W. Weiner</u> Barry W. Weiner President

cc: Robert H. Cohen, Esq.