

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

March 31, 2011

Via E-mail

Dr. Elazar Rabbani, Chairman of the Board Enzo Biochem, Inc. 527 Madison Ave New York, New York 10022

Re: Enzo Biochem, Inc.

Form 10-K for the Fiscal Year Ended July 31, 2010

Filed October 14, 2010 File No. 001-09974

Dear Dr. Rabbani:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

/s/ Pamela Howell for

John Reynolds Assistant Director