

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT PURSUANT  
TO SECTION 13 OR 15(D) OF THE  
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): **January 28, 2010**

**Enzo Biochem, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

**New York**

(State or Other Jurisdiction of Incorporation)

**001-09974**

(Commission File Number)

**13-2866202**

(IRS Employer Identification No.)

**527 Madison Avenue  
New York, New York**

(Address of Principal Executive Offices)

**10022**

(Zip Code)

**(212) 583-0100**

(Registrant's Telephone Number, Including Area Code)

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions *see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 8.01 Other Events.**

On January 28, 2010, Enzo Biochem, Inc. (the “Company”) reached an agreement with Mr. Shahram K. Rabbani to settle all of his claims against the Company, Dr. Elazar Rabbani, the Chairman of the Board of Directors of the Company (the “Board”), Chief Executive Officer and Secretary of the Company, and Barry W. Weiner, the President, Chief Financial Officer, Principal Accounting Officer, Treasurer and a member of the Board, relating to the termination of Mr. Shahram K. Rabbani’s employment with the Company’s clinical labs division (“Enzo Labs”) in March 2009.

As previously announced, on April 30, 2009, Mr. Shahram K. Rabbani submitted a demand for arbitration and related statement of claim to the American Arbitration Association, naming the Company, Dr. Elazar Rabbani and Mr. Barry W. Weiner as respondents and alleging, among other things, claims relating to the termination of Mr. Shahram K. Rabbani’s employment as President of Enzo Labs. Mr. Shahram K. Rabbani sought damages of no less than \$10 million, consisting of contractually prescribed severance payments (approximately \$2.5 million), plus additional base salary and bonus going forward for several years, compensatory damages, and punitive damages, including attorneys’ fees and costs in connection with these proceedings. Under the terms of the settlement agreement, Mr. Shahram K. Rabbani will discontinue all actions he commenced against the Company, Dr. Elazar Rabbani and Mr. Barry W. Weiner. In exchange, the Company has agreed to pay Mr. Shahram K. Rabbani a lump sum payment of \$2.7 million. The parties have also agreed to execute mutual general releases.

In addition, as previously disclosed by the Company in its Current Report on Form 8-K filed with the Securities and Exchange Commission on January 28, 2010, on January 27, 2010 the U.S. District Court for the Southern District of New York entered an order denying Mr. Shahram K. Rabbani’s motion for a preliminary injunction to enjoin the Company from convening the Company’s 2009 Annual Meeting of Shareholders on January 29, 2010 (the “Annual Meeting”). Accordingly, the Annual Meeting was held as originally scheduled on January 29, 2010.

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ENZO BIOCHEM, INC.

Date: January 29, 2010

By: /s/ Barry W. Weiner  
Barry W. Weiner  
President

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