

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ENZO BIOCHEM, INC.

(Exact name of registrant as specified in its charter)

New York
(State or other jurisdiction
of incorporation or organization)

31-2866202
(I.R.S. Employer
Identification No.)

60 Executive Boulevard, Farmingdale, NY 11735

(Address of principal executive offices including zip code)

Enzo Biochem, Inc. 1999 Stock Option Plan

(Full title of the plan)

Barry W. Weiner
Enzo Biochem, Inc., 60 Executive Boulevard, Farmingdale, NY 11735

(Name and address of agent for service)

(631) 755-5500
(Telephone number, including area code, of agent for service)

Copy to:

Robert H. Cohen, Esq.
Morrison Cohen Singer & Weinstein LLP
750 Lexington Avenue, 8th Floor
New York, NY 10022

<TABLE>
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CALCULATION OF REGISTRATION FEE

Amount of Registration Fee(3)	Titles of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price (2)	
	-----	-----	-----	-----	
<S> \$1,655.08	Common Stock, par value \$.01 per share	<C> 1,000,000 shares(1)	<C> \$17.99	<C> \$17,990,000	<C>

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(1) In addition, pursuant to Rule 416(c) under the Securities Act of 1933, this registration statement also covers an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plan described herein.

(2) Estimated pursuant to Rule 457(h) solely for the purpose of determining the registration fee. It is not known how many shares will be purchased under the 1999 Employee Stock Option Plan or at what price such shares will be purchased. The proposed maximum aggregate offering price per share and the proposed maximum aggregate offering price have been calculated pursuant to 457(c) assuming the issuance of all shares of Common Stock upon the

exercise of stock options to be granted under the 1999 Employee Stock Option Plan at an assumed exercise price of \$17.99 per share, which price was the average of the high and low prices of the Registrant's Common Stock reported in the consolidated trading system of the New York Stock Exchange on May 22, 2002.

- (3) Calculated pursuant to Section 6 under the Securities Act of 1933.

EXPLANATORY NOTE

Pursuant to General Instruction E of Form S-8, the Registrant hereby makes the following statement:

On September 15, 1999, the Registrant filed a Registration Statement on Form S-8 (File No. 333-87153) (hereinafter, the "First Registration Statement") for purposes of effecting the registration under the Securities Act of 1933, as amended (the "Securities Act"), of (i) 950,000 shares (which became 1,047,375 shares due to the Company's issuance of a 5% stock dividend during the fiscal year ending July 31, 2001 and fiscal year ended July 31, 2002) of common stock, \$0.01 par value per share ("Common Stock"), issuable by the Registrant upon exercise of stock options granted or to be granted by the Registrant under its 1999 Stock Option Plan (the "Plan"). This Registration Statement on Form S-8 is filed by the Registrant to register an additional 1,000,000 shares of its Common Stock (which became 1,050,000 shares due to the Company's issuance of a 5% stock dividend during fiscal year ended July 31, 2002 ("2002 Dividend")) which are issuable upon the exercise of options available for grant under the Plan, pursuant to an amendment to the Plan authorized by the stockholders at a meeting dated January 23, 2002. These 1,000,000 shares (1,050,000 after the issuance of the 2002 Dividend) are in addition to the 1,047,375 shares of the Registrant's common stock that were previously registered pursuant to the First Registration Statement. Pursuant to General Instruction E to Form S-8, the Registrant hereby incorporates herein by reference the contents of the First Registration Statement, the Exhibit Indices thereto and the Exhibits filed therewith.

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INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents filed by the Registrant with the SEC are incorporated into and made a part of this prospectus:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 2001;
- (b) all reports previously filed by the Registrant under Section 13(a) or 15(d) of the Exchange Act, since the end of the fiscal year covered by the audited financial statements described in (a) above; and the
- (c) the description of the common stock contained in the Registrant's registration statement on Form 8-A filed with the SEC under the Exchange Act, including any amendments or report filed for the purpose of updating such description.

In addition, all documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities offered by this prospectus have been sold or which deregisters all of the securities then remaining unsold, shall be deemed to be incorporated into and made a part of this prospectus.

Any person receiving a copy of this prospectus may obtain without charge, upon written or oral request, a copy of (1) any of the documents (without their exhibits) that are incorporated into this prospectus and (2) copies of all reports, proxy statements and other communications distributed by the Registrant to its security holders generally (but only to the extent such reports, proxy statements and other communications have not already been received by such person). Requests should be addressed to Enzo Biochem, Inc., Attention: Secretary, 60 Executive Boulevard, Farmingdale, NY 11735.

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Item 8. Exhibits.

Exhibit No.	Description
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23.1	Consent of Morrison Cohen Singer & Weinstein LLP (included in its Opinion filed as Exhibit 5.1 hereto)	7
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24.1	Powers of Attorney (included on signature page)	

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EXHIBIT 5.1

May 28 2002

Enzo Biochem, Inc.
60 Executive Boulevard
Farmingdale, New York 11735

Gentlemen:

You have requested our opinion with respect to the offer and sale by you, Enzo Biochem, Inc., a New York corporation (the "Company"), pursuant to a Registration Statement (the "Registration Statement") on Form S-8 under the Securities Act of 1933, as amended (the "Act"), of up to 1,997,500 shares (the "Shares") of common stock, par value \$.01 per share, of the Company (the "Common Stock"), issuable upon exercise of stock options (the "Options") available for grant under the 1999 Employee Stock Option Plan.

We have examined originals, or copies certified or otherwise identified to our satisfaction, of such documents and corporate and public records as we deem necessary as a basis for the opinion hereinafter expressed. With respect to such examination, we have assumed the genuineness of all signatures appearing on all documents presented to us as originals, and the conformity to the originals of all documents presented to us as conformed or reproduced copies. Where factual matters relevant to such opinion were not independently established, we have relied upon certificates of executive officers and responsible employees and agents of the Company.

Based upon the foregoing, it is our opinion that the Shares have been duly and validly authorized and when sold, paid for and issued as contemplated by the Registration Statement and the Option will be duly and validly issued and fully paid and nonassessable.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not thereby concede that we come within the categories of persons whose consent is required by the Act or the General Rules and Regulations promulgated thereunder.

Very truly yours,

MORRISON COHEN SINGER & WEINSTEIN LLP

EXHIBIT 23.2

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-00000) pertaining to the 1999 Employee Stock Option Plan of Enzo Biochem, Inc. of our report dated October 4, 2001 with respect to the consolidated financial statements and schedule of Enzo Biochem, Inc. included in its Annual Report (Form 10-K) for the fiscal year ended July 31, 2001 filed with the Securities and Exchange Commission.

Ernst & Young LLP

New York, New York
May 28, 2002