UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ProPhase Labs, Inc.

(Exact name of registrant as specified in its charter)

Nevada (State or other jurisdiction of incorporation or organization) 23-2577138 (I.R.S. Employer Identification Number)

621 N. Shady Retreat Road, Doylestown, Pennsylvania

(Address of Principal Executive Offices)

2010 Equity Compensation Plan 2010 Directors' Equity Compensation Plan

(Full title of the plans)

Ted Karkus Chief Executive Officer 621 N. Shady Retreat Road Doylestown, Pennsylvania Tel: (215) 345-0919

Copy to:

Herbert Kozlov, Esq. Reed Smith LLP 599 Lexington Avenue, 28th Floor New York, New York 10022 Tel: (212) 521-5400; Fax: (212) 521-5450

(Name, address and telephone number (including area code) of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one):

Large accelerated filer □ Non-accelerated filer □ (Do not check if a smaller reporting company)

Smaller reporting company \square

CALCULATION OF REGISTRATION FEE

Title of Securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share(2)	Proposed maximum aggregate offering price(2)	Amount of registration fee
Common Stock, par value \$0.0005 per share, issuable under the 2010 Equity Compensation Plan	1,781,500	\$1.32	\$2,351,580.00	\$167.67
Common Stock, par value \$0.0005 per share, issuable under the 2010 Directors' Equity Compensation Plan	214,165	\$1.32	\$282,697.80	\$20.16

(1) In addition, this registration statement covers such indeterminate number of shares of common stock, par value \$0.0005 ("Common Stock"), as may be issued to prevent dilution resulting from stock splits, stock dividends or similar transactions in accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"). All such shares are subject to the reoffer prospectus included herein and are registered for offer and sale hereunder.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) promulgated under the Securities Act. The offering price per share and aggregate offering price are based upon the average of the high and low prices for the Common Stock as reported on the Nasdaq Global Market on September 28, 2010, in accordance with Rule 457(c) of the Securities Act.

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Statement

This registration statement on Form S-8 is being filed to register (i) 1,781,500 shares of Common Stock of ProPhase Labs, Inc. (the "Company") available for issuance under the 2010 Equity Compensation Plan, as approved by the Company's stockholders at the Company's 2010 annual stockholders' meeting, and (ii) 214,165 shares of the Company's Common Stock available for issuance under the 2010 Directors' Equity Compensation Plan, as approved by the Company's 2010 annual stockholders at the Company's stockholders at the Company's stockholders at the Company's stockholders at the Company's 2010 annual stockholders' meeting.

Part I

INFORMATION REQUIRED IN SECTION 10(a) PROSPECTUS

As permitted by the rules of the Securities and Exchange Commission (the "SEC"), this registration statement omits the information specified in Part I of Form S-8. The documents containing the information specified in Part I will be delivered to the participants in the plans as required by Rule 428(b)(1) under the Securities Act.

Part II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents are hereby incorporated by reference into this registration statement:

- (a) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2009.
- (b) Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2010.
- (c) Our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2010.
- (d) Current report on Form 8-K filed with the Commission on March 5, 2010.
- (e) Current report on Form 8-K filed with the Commission on March 23, 2010.
- (f) Current report on Form 8-K filed with the Commission on March 25, 2010.
- (g) Current report on Form 8-K filed with the Commission on April 28, 2010.
- (h) Current report on Form 8-K filed with the Commission on May 10, 2010.
- (i) Current report on Form 8-K filed with the Commission on May 18, 2010.
- (j) Current report on Form 8-K filed with the Commission on August 12, 2010.
- (k) Current report on Form 8-K filed with the Commission on August 19, 2010.
- (l) Definitive Proxy Statement on Form 14A filed with the SEC on April 2, 2010.
- (m) The description of our Common Stock, which was included in our registration statement on Form 8-A, filed with the Commission on September 25, 1996, pursuant to Section 12(g) of the Exchange Act.

In addition, all documents that we subsequently file 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 have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this registration statement and to be a part hereof from the date of filing of such documents.

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Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

The Company is incorporated under the laws of the state of Nevada. Nevada law provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement in connection with any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, in which any such person is made a party by reason of the fact that the person is or was a director, officer, employee of or agent to the corporation, or is or was serving at the request of the corporation in such capacity of another entity (other than an action by or in the right of the corporation - a "derivative action"), if he or she is not liable under Section 78.138 of the Nevada Revised Statutes or if he or she acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. A similar standard is applicable in the case of derivative actions, except that indemnification only extends to expenses (including amounts paid in settlement and attorneys' fees) incurred in connection with the defense or settlement of such action, and the statute requires court approval before there can be any indemnification where the person seeking indemnification has been found liable to the corporation. The statute provides that it is not exclusive of other indemnification that may be granted by a corporation's articles of incorporation, bylaws, disinterested director vote, shareholder vote, agreement, or otherwise.

Section 78.138(7) of the Nevada Revised Statutes provides that, with certain exceptions, a director or officer is not individually liable to the corporation or its stockholders or creditors for any damages as a result of any act or failure to act in his or her capacity as a director or officer unless it is proven that:

(a) his or her act or failure to act constituted a breach of his fiduciary duties as a director or officer; and

(b) his or her breach of those duties involved intentional misconduct, fraud or a knowing violation of law.

The Company's amended and restated bylaws provide that, to the fullest extent permitted by Nevada law, as now in effect or as amended, it will indemnify and hold harmless any person made or threatened to be made a party to any action (other than action by or in the right of the Company) by reason of the fact that he or she was director, officer, employee or agent of the Company or was serving, at the Company's request, as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise. Any amendment of this provision will not reduce the Company's indemnification obligations relating to actions taken before an amendment.

The Company has also entered into substantially identical indemnity agreements with each member of the Board of Directors, Mr. Ted Karkus, our Chairman and Chief Executive Officer, and Mr. Robert V. Cuddihy, Jr., our Chief Operating Officer. These agreements provide, among other things, that we will indemnify each director, Mr. Karkus and Mr. Cuddihy in the event that they become a party or otherwise a participant in any action or proceeding on account of their service as a director or officer of the Company (or service for another corporation or entity in any capacity at the request of the Company) to the fullest extent permitted by applicable law. Under the indemnity agreement, we will pay, in advance of the final disposition of any such action or proceeding, expenses (including attorneys' fees) incurred by our directors or officers in defending or otherwise responding to such action or proceeding upon receipt of a written undertaking from the directors or officers to repay the amount advanced consistent with applicable law in the event that a court shall ultimately determine that he or she is not entitled to be indemnified for such expenses. The contractual rights to indemnification provided by the indemnity agreements are subject to the limitations and conditions specified in the agreements, and are in addition to any other rights each director and officer may have under our amended and restated bylaws, each as amended from time to time, and applicable law.

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Directors and officers of the Company are also covered by directors' and officers' liability insurance under which they are insured (subject to certain exceptions and limitations specified in the policy) against expenses and liabilities arising out of proceedings to which they are parties by reason of being or having been directors or officers. Under these policies, the insurer, on the Company's behalf, may also pay amounts for which the Company has granted indemnification to the directors or officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit No.	Description of Exhibit
4.1	2010 Equity Compensation Plan (incorporated by reference to Exhibit B to the Company's Definitive Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on April 2, 2010)
4.2	2010 Directors' Equity Compensation Plan (incorporated by reference to Exhibit C to the Company's Definitive Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on April 2, 2010)
4.3	Amendment to 2010 Directors' Equity Compensation Plan (incorporated by reference to Exhibit 10.3 of the Company's Form 8-K filed with the Securities and Exchange Commission on May 10, 2010)
5.1	Opinion of Reed Smith LLP.
23.1	Consent of Amper, Politziner & Mattia LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Reed Smith LLP (included in Exhibit 5.1).

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) that, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering; and

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(4) that, for determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to the purchaser:

(i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424 of the Securities Act;

(ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Doylestown, State of Pennsylvania, on September 30, 2010.

ProPhase Labs, Inc., a Nevada corporation

<u>/s/ Ted Karkus</u> By: Ted Karkus Chief Executive Officer and Chairman

Pursuant to the requirements of the Securities Act of 1933, this Form S-8 registration statement has been signed by the following persons in the capacities and on the dates indicated:

Principal Executive Officer:

<u>/s/ Ted Karkus</u> Ted Karkus Chief Executive Officer and Chairman Dated: September 30, 2010

Directors:

<u>/s/ Ted Karkus</u> Ted Karkus Dated: September 30, 2010 (Chairman of the Board of Directors)

<u>/s/ Mark Frank</u> Mark Frank Dated: September 29, 2010

<u>/s/ Mark Leventhal</u> Mark Leventhal Dated: September 29, 2010 Principal Financial and Accounting Officer:

<u>/s/ Robert V. Cuddihy, Jr.</u> Robert V. Cuddihy, Jr. Interim Chief Financial Officer and Chief Operating Officer Dated: September 30, 2010

<u>/s/ Mark Burnett</u> Mark Burnett Dated: September 29, 2010

<u>/s/ Louis Gleckel, MD</u> Louis Gleckel, MD Dated: September 29, 2010

<u>/s/ James McCubbin</u> James McCubbin Dated: September 29, 2010

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23.2	Consent of Reed Smith LLP (included in Exhibit 5.1).

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September 30, 2010

ProPhase Labs, Inc. 621 N. Shady Retreat Road Doylestown, Pennsylvania

Ladies and Gentlemen:

We have acted as counsel for ProPhase Labs, Inc., a Nevada corporation (the "Company"), in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act"), of 1,995,665 shares of common stock, par value \$0.0005 per share, of the Company (the "Shares") issuable under the Company's 2010 Equity Compensation Plan (the "2010 Plan") and the 2010 Directors' Equity Compensation Plan (the "2010 Directors' Plan", and together with the 2010 Plan, the "Plans") pursuant to the registration statement on Form S-8 filed by the Company on September 30, 2010 (the "Registration Statement") with the Securities and Exchange Commission (the "Commission"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or the prospectus forming a part thereof, other than as to the issue of the Shares.

In connection with the foregoing, we have examined originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates of public officials, and other instruments as we have deemed necessary or advisable for the purpose of rendering this opinion. As to questions of fact material to this opinion that have not been independently established, we have relied upon certificates or comparable documents of officers and representatives of the Company.

Based upon the foregoing, we are of the opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers, and have been issued by the Company against payment therefor in the circumstances contemplated by the Plans, and assuming in each case that the individual issuances, grants or awards under the Plans are duly authorized by all necessary corporate action of the Company and duly issued, granted or awarded and exercised in accordance with the requirements of law and the Plans (and the agreements and awards duly adopted thereunder and in accordance therewith), the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company and the Shares will be validly issued, fully paid and non-assessable.

ReedSmith

Our opinion is based solely on our review of the Nevada Revised Statutes and such corporate records as we deemed necessary or appropriate.

We consent to the filing of this opinion as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Reed Smith LLP a Limited Liability Partnership

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 26, 2010, relating to the financial statements and financial statement schedules of ProPhase Labs, Inc. and subsidiaries (the "Company") appearing in the Annual Report on Form 10-K of the Company for the year ended December 31, 2009.

/s/ Amper, Politziner & Mattia LLP

September 30, 2010