

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

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

CODEXIS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

71-0872999
(I.R.S. Employer
Identification Number)

**200 Penobscot Drive
Redwood City, CA 94063**
(Address of Principal Executive Offices including Zip Code)

Codexis, Inc. 2010 Equity Incentive Award Plan
(Full Title of the Plan)

Douglas T. Sheehy
Senior Vice President, General Counsel and Secretary
Codexis, Inc.
**200 Penobscot Drive
Redwood City, CA 94063
(650) 421-8100**
(Name and Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copy To:
**Patrick A. Pohlen, Esq.
Gregory Chin, Esq.
Latham & Watkins LLP
140 Scott Drive
Menlo Park, California 94025
(650) 328-4600**

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 the definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. Check one:

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Smaller Reporting Company

CALCULATION OF REGISTRATION FEE

Title of Securities To Be Registered	Amount To Be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.0001 Par Value(4)	1,506,707 (2)	\$2.32 (3)	\$ 3,495,560.24	\$ 476.80

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall also cover any additional shares of the Registrant's common stock that become issuable under the Codexis, Inc. 2010 Equity Incentive Award Plan (the "2010 Plan"), by reason of any stock dividend, stock split, recapitalization or similar transaction effected without the Registrant's receipt of consideration which would increase the number of outstanding shares of common stock.
- (2) Represents 1,506,707 additional shares of common stock reserved for future issuance under the 2010 Plan.
- (3) This estimate is made pursuant to Rule 457(c) and Rule 457(h) of the Securities Act solely for purposes of calculating the registration fee. The Proposed Maximum Offering Price Per Share is \$2.32, which is the average of the high and low prices for the Registrant's common stock as reported on The Nasdaq Global Select Market on March 29, 2013.
- (4) Each share of common stock being registered hereunder, if issued prior to the termination by the Registrant of its Rights Agreement, dated as of September 3, 2012, will include one preferred stock purchase right representing the right to purchase one one-thousandth (subject to adjustment) of a share of the Registrant's Series A Junior Participating Preferred Stock. Prior to the occurrence of certain events, the preferred stock purchase rights will not be exercisable or evidenced separately from the common stock.

This registration statement will become effective upon filing in accordance with Rule 462 under the Securities Act.

**Proposed sale to take place as soon after the effective date of the
registration statement as awards under the plans are exercised and/or vest.**

REGISTRATION OF ADDITIONAL SECURITIES

By a registration statement on Form S-8 filed with the Securities and Exchange Commission (the "SEC") on June 24, 2010, File No. 333-167752 (the "Original Registration Statement"), Codexis, Inc. (the "Registrant") registered 1,997,855 shares of common stock, par value \$0.0001 per share (the "Common Stock"), issuable under the Codexis, Inc. 2010 Equity Incentive Award Plan (the "2010 Plan"). The Original Registration Statement also registered 8,307,026 shares of Common Stock issuable under the Codexis, Inc. 2002 Stock Plan (the "2002 Plan"), which shares become available for issuance under the 2010 Plan to the extent awards under the 2002 Plan are forfeited or lapse unexercised and are not issued under the 2002 Plan. By a registration statement on Form S-8 filed with the SEC on February 10, 2011, File No. 333-172166 (the "2011 Registration Statement"), the Registrant registered an additional 1,393,142 shares of Common Stock issuable under the 2010 Plan. By a registration statement on Form S-8 filed with the SEC on March 5, 2012, File No. 333-179903 (the "2012 Registration Statement"), the Registrant registered an additional 1,439,827 shares of Common Stock issuable under the 2010 Plan. The Registrant is hereby registering an additional 1,506,707 shares of Common Stock issuable under the 2010 Plan, which shares are now available for grant due to an automatic annual increase provision in the 2010 Plan.

Pursuant to Instruction E of Form S-8, the contents of the Original Registration Statement, the 2011 Registration Statement and the 2012 Registration Statement are incorporated by reference in this registration statement on Form S-8.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information called for in Part I of Form S-8 is not being filed with or included in this Form S-8 (by incorporation by reference or otherwise) in accordance with the rules and regulations of the SEC.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

In this registration statement, Codexis, Inc. is sometimes referred to as "Registrant," "we," "us" or "our."

Item 3. Incorporation of Documents by Reference.

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this registration statement, and later information filed with the SEC will update and supersede this information. We hereby incorporate by reference into this registration statement the following documents previously filed with the SEC:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed by the Registrant with the SEC on April 2, 2013;
- (b) The description of the Registrant's preferred stock purchase rights, contained in the Registrant's registration statement on Form 8-A (Registration No. 001-34705), filed by the Registrant with the SEC under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on September 4, 2012, including any amendments or reports filed for the purpose of updating such description; and
- (c) The description of the Registrant's Common Stock contained in the Registrant's registration statement on Form 8-A (Registration No. 001-34705), filed by the Registrant with the SEC under Section 12(b) of the Exchange Act on April 19, 2010, including any amendments or reports filed for the purpose of updating such description.

All documents that the Registrant subsequently files pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment to the registration statement which indicates that all of the shares of Common Stock offered have been sold or which deregisters all of such shares then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of the filing of such documents; except as to any portion of any future annual or quarterly report to stockholders, or document or current report furnished under any current or future items of Form 8-K (including current Items 2.02 and 7.01), in each case, that is not deemed filed under such provisions. For the purposes of this registration statement, any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded to the extent that a statement contained herein

or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Under no circumstances will any information filed under current items 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

Latham & Watkins LLP, counsel to the Registrant, and certain attorneys and investment funds affiliated with the firm collectively own an aggregate of less than 1% of the Registrant's Common Stock.

Item 6. Indemnification of Directors and Officers.

Pursuant to section 145 of the Delaware General Corporation Law (the "DGCL"), a corporation has the power to indemnify a party to any threatened, pending, or completed legal proceeding by reason of his or her service on behalf of a corporation. The DGCL further mandates that indemnification shall be made to any such person who has been successful "on the merits" or "otherwise" with respect to the defense of any such proceeding, but does not require indemnification in any other circumstances. The DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person has acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his or her conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification may be made with respect to any matter as to which such person has been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances. A corporation may advance the expenses incurred in defending such a proceeding upon the giving of an undertaking, or promise, to repay such sums in the event it is later determined that such indemnitee is not entitled to be indemnified.

The Registrant's amended and restated certificate of incorporation and amended and restated bylaws provide that the Registrant will indemnify and advance expenses to each the Registrant's directors and officers, and may indemnify and advance expenses to the Registrant's employees and other agents, to the fullest extent permitted by the DGCL, as described above.

The Registrant has also entered into indemnification agreements with each of its directors and executive officers, and certain other of its employees, in addition to the indemnification provisions provided for in its amended and restated certificate of incorporation and amended and restated bylaws. Subject to the limitations of the DGCL and other applicable law, these agreements provide for the indemnification of the Registrant's directors, officers and some employees for certain expenses and liabilities incurred in connection with any action, suit, proceeding or alternative dispute resolution mechanism, or hearing, inquiry or investigation that may lead to the foregoing, to which they are a party or participant in, or are threatened to be made a party or participant in, by reason of the fact that they are or were a director, officer, employee, agent or fiduciary of the Registrant, or any of the Registrant's subsidiaries, by reason of any action or inaction by them while serving as an officer, director, agent or fiduciary, or by reason of the fact that they were serving at the Registrant's request as a director, officer, employee, agent or fiduciary of another entity. In the case of an action or proceeding by or in the right of the Registrant or any of its subsidiaries, no indemnification will be provided for any claim where a court determines that the indemnified party is prohibited from receiving indemnification. The Registrant intends to enter into indemnification agreements with any new directors and executive officers in the future.

The Registrant has purchased and will maintain insurance on behalf of any person who is or was a director or officer against any loss arising from any claim asserted against him or her and incurred by him or her in that capacity, subject to certain exclusions and limits of the amount of coverage.

Item 7. Exemption from Registration Claimed.

Not Applicable.

Item 8. Exhibits.

Exhibit No.	Description
4.1	Amended and Restated Certificate of Incorporation of Codexis, Inc. (incorporated by reference from Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q, filed with the SEC on May 28, 2010 (File No. 001-34705)).
4.2	Certificate of Designations of Series A Junior Participating Preferred Stock of Codexis, Inc., filed with the Secretary of State of the State of Delaware on September 4, 2012 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed with the SEC on September 4, 2012 (File No. 001-34705)).
4.3	Amended and Restated Bylaws of Codexis, Inc. (incorporated by reference from Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q, filed with the SEC on May 28, 2010 (File No. 001-34705)).
4.4	Form of Codexis, Inc.'s Common Stock Certificate (incorporated by reference from Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q, filed with the SEC on August 9, 2012 (File No. 333-164044)).
4.5	Rights Agreement by and between the Company and Wells Fargo Bank, N.A., which includes the Form of Certificate of Designations of Series A Junior Participating Preferred Stock as Exhibit A, the Form of Right Certificate as Exhibit B and the Summary of Rights to Purchase Preferred Shares as Exhibit C, dated as of September 3, 2012 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed with the SEC on September 4, 2012 (File No. 001-34705)).
4.6	Codexis, Inc. 2010 Equity Incentive Award Plan and related documents (incorporated by reference from Exhibit 10.11 to the Registrant's Registration Statement on Form S-1/A, filed with the SEC on March 31, 2010 (File No. 333-164044)).
5.1	Opinion of Latham & Watkins LLP.
23.1	Consent of Latham & Watkins LLP (included in Exhibit 5.1 hereto).
23.2	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney (included in the signature page to this registration statement).

Item 9. Undertakings.

(a) The 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:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change

in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) 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;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, 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.

(b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) 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 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 SEC such indemnification is against public policy as expressed in the Securities 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 Securities Act and will be governed by the final adjudication of such issue.

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 Redwood City, State of California, on this 2nd day of April, 2013.

CODEXIS, INC.

By: /s/ John J. Nicols

John J. Nicols

President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints John J. Nicols, David D. O'Toole and Douglas T. Sheehy, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Registration Statement, including any and all post-effective amendments and amendments thereto, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
<u>/s/ John J. Nicols</u> John J. Nicols	President and Chief Executive Officer (Principal Executive Officer)	April 3, 2013
<u>/s/ David D. O'Toole</u> David D. O'Toole	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	April 3, 2013
<u>/s/ Thomas R. Baruch</u> Thomas R. Baruch	Chairman of the Board of Directors	April 3, 2013
<u>/s/ Byron L. Dorgan</u> Byron L. Dorgan	Director	April 3, 2013
<u>/s/ Alexander A. Karsner</u> Alexander A. Karsner	Director	April 3, 2013
<u>/s/ Bernard J. Kelley</u> Bernard J. Kelley	Director	April 3, 2013
<u>/s/ Pedro I. Mizutani</u> Pedro I. Mizutani	Director	April 3, 2013
<u>/s/ Dennis P. Wolf</u> Dennis P. Wolf	Director	April 3, 2013

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FIRM / AFFILIATE OFFICES

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April 3, 2013

Codexis, Inc.
200 Penobscot Drive
Redwood City, CA 94063

Re: Registration Statement on Form S-8: 1,506,707 shares of common stock, par value \$0.0001 per share

Ladies and Gentlemen:

We have acted as special counsel to Codexis, Inc., a Delaware corporation (the “*Company*”), in connection with the registration by the Company of 1,506,707 shares of common stock of the Company, par value \$0.0001 per share (the “*Shares*”), issuable under the Company's 2010 Equity Incentive Award Plan (the “*2010 Plan*”). The Shares are included in a registration statement on Form S-8 under the Securities Act of 1933, as amended (the “*Securities Act*”), filed with the Securities and Exchange Commission (the “*Commission*”) on April 3, 2013 (the “*Registration Statement*”). 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 expressly stated herein with respect to the issuance of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware, and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our 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 (not less than par value) in the circumstances contemplated by and pursuant to the 2010 Plan, and assuming in each case that the individual issuances, grants or awards under the 2010 Plan 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 2010 Plan (and the agreements and awards duly adopted thereunder and in accordance therewith), the issuance 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. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Securities Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Codexis, Inc. 2010 Equity Incentive Award Plan of our reports dated April 2, 2013, with respect to the consolidated financial statements of Codexis, Inc. and the effectiveness of internal control over financial reporting of Codexis, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2012, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Jose, California

April 3, 2013