

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

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Estimated average burden

hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934
or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Hicks Karen A</u> (Last) (First) (Middle) <u>C/O TARGACEPT, INC.</u> <u>200 EAST FIRST STREET, SUITE 300</u> (Street) <u>WINSTON- SALEM NC 27101</u> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>04/13/2010</u>	3. Issuer Name and Ticker or Trading Symbol <u>TARGACEPT INC [TRGT]</u>	4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>VP Human Resources</u>	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person
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Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
<u>Common Stock</u>	<u>4,226</u>	<u>D</u>	

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
<u>Employee Stock Option (right to buy)</u>	<u>(1)</u>	<u>08/15/2016</u>	<u>Common Stock</u>	<u>12,000</u>	<u>5.55</u>	<u>D</u>	
<u>Employee Stock Option (right to buy)</u>	<u>(2)</u>	<u>03/29/2017</u>	<u>Common Stock</u>	<u>500</u>	<u>8.32</u>	<u>D</u>	
<u>Employee Stock Option (right to buy)</u>	<u>(3)</u>	<u>12/18/2017</u>	<u>Common Stock</u>	<u>12,400</u>	<u>8.51</u>	<u>D</u>	
<u>Employee Stock Option (right to buy)</u>	<u>(4)</u>	<u>01/08/2019</u>	<u>Common Stock</u>	<u>24,063</u>	<u>2.93</u>	<u>D</u>	
<u>Employee Stock Option (right to buy)</u>	<u>(5)</u>	<u>01/18/2020</u>	<u>Common Stock</u>	<u>33,000</u>	<u>20.68</u>	<u>D</u>	

Explanation of Responses:

1. The option vests (vested) in equal installments on the last day of each of 16 consecutive calendar quarters beginning with September 30, 2006.
2. The option vests (vested) in equal installments on the last day of each of 16 consecutive calendar quarters beginning with March 31, 2007.
3. The option vests (vested) in equal installments on the last day of each of 16 consecutive calendar quarters beginning with December 31, 2007.
4. The option vests (vested) in equal installments on the last day of each of 16 consecutive calendar quarters beginning with March 31, 2009.
5. The option vests (vested) in equal installments on the last day of each of 16 consecutive calendar quarters beginning with March 31, 2010.

Remarks:
/s/ Karen A. Hicks
04/22/2010

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 5 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

Securities and Exchange Commission
Judiciary Plaza
450 Fifth Street, N.W.
Washington, DC 20549

Re: Targacept, Inc.

Gentlemen:

Pursuant to General Instruction 7 to Form 3 (Initial Statement of Beneficial Ownership), Form 4 (Statement of Changes in Beneficial Ownership) and Form 5 (Annual Statement of Changes in Beneficial Ownership) promulgated by the Securities and Exchange Commission pursuant to Section 16 of the Securities Exchange Act of 1934, the undersigned director, officer and/or shareholder of Targacept, Inc. (the "Company") hereby authorizes and designates Peter A. Zorn, Mauri K. Hodges, and Alan A. Musso, and each of them, to execute and file with the Commission on her behalf any and all statements on Form 3, Form 4 or Form 5 relating to her beneficial ownership of securities of the Company as required by Section 16(a) of the Securities Exchange Act of 1934 and the rules of the Commission promulgated thereunder. This authorization and designation shall be effective for so long as the undersigned remains subject to the provisions of Section 16 of the Securities Exchange Act of 1934.

Effective as of April 19, 2010.

/s/ Karen A. Hicks
Karen A. Hicks
