SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

SCHEDULE 14D-9

Solicitation/Recommendation Statement Under

Section 14(d)(4) of the Securities Exchange Act of 1934

(Amendment No. 16)

Illumina, Inc.

(Name of Subject Company)

Illumina, Inc.

(Name of Person Filing Statement)

Common Stock, \$0.01 par value

(Title of Class of Securities)

452327109

(CUSIP Number of Class of Securities)

Christian G. Cabou

Senior Vice President & General Counsel

Illumina, Inc.

5200 Illumina Way

San Diego, CA 92122

(858) 202-4500

(Name, address and telephone number of person authorized to receive notices and

communications on behalf of the person filing statement)

With a copy to:

Frederick W. Kanner

Dewey & LeBoeuf LLP

1301 Avenue of the Americas

New York, New York 10019

(212) 259-7300

[&]quot; Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

This Amendment No. 16 to Schedule 14D-9 (this Amendment) amends and supplements the Solicitation/Recommendation Statement on Schedule 14D-9 (as amended from time to time, the Statement) originally filed by Illumina, Inc., a Delaware corporation (Illumina), with the Securities and Exchange Commission (SEC) on February 7, 2012, relating to the tender offer by CKH Acquisition Corporation, a Delaware corporation (Purchaser) and an indirect wholly owned subsidiary of Roche Holding Ltd, a joint stock company organized under the laws of Switzerland (Roche), to purchase all outstanding shares of Illumina common stock, par value \$0.01 per share, together with the associated preferred stock purchase rights, for \$51.00 per share, net to the seller in cash, without interest and less applicable withholding taxes.

Except as specifically noted herein, the information set forth in the Statement remains unchanged. Capitalized terms used in this Amendment without definition have the respective meanings set forth in the Statement.

ITEM 9. Exhibits.

Item 9 of the Statement is hereby amended and supplemented by adding the following exhibit:

Exhibit

No. Description

(a)(49) Press Release issued by Illumina, dated as of April 10, 2012 (incorporated by reference to the Schedule 14A filed with the SEC by Illumina on April 10, 2012)

SIGNATURE

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this Statement is true, complete and correct.

ILLUMINA, INC.

By: /s/ Christian G. Cabou Name: Christian G. Cabou

Title: Senior Vice President & General Counsel

Dated: April 10, 2012

EXHIBIT INDEX

Exhibit

No. Description

(a)(49) Press Release issued by Illumina, dated as of April 10, 2012 (incorporated by reference to the Schedule 14A filed with the SEC by Illumina on April 10, 2012)