

Protalix BioTherapeutics, Inc.
2 Snunit Street
Science Park
Carmiel 20100
Israel

September 25, 2007

VIA COURIER AND EDGAR
Mr. Greg Belliston
Securities and Exchange Commission
Division of Corporate Finance
Mail Stop 6010
100 F Street, N.E.
Washington, D.C. 20549

Re: Protalix BioTherapeutics, Inc.
Registration Statement on Form S-3 (File No. 333-144801)
Acceleration Request

Ladies and Gentlemen:

Protalix BioTherapeutics, Inc. (the "Company") pursuant to Rule 461 under the Securities Act of 1933, as amended, hereby requests the Securities and Exchange Commission (the "Commission") to accelerate the effective date of the above-referenced Registration Statement and declare the Registration Statement, as then amended, effective as of 4:30 P.M., eastern standard time, on September 26, 2007, or as soon thereafter as practicable. The Company also requests the Commission to specifically confirm such effective date and time to the Company in writing.

The Company acknowledges that (i) should the Commission or the staff of the Commission, acting pursuant to delegated authority, declare the filing effective, such declaration does not foreclose the Commission from taking any action with respect to the filing; (ii) the action of the Commission or the staff of the Commission, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and (iii) the Company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Jim Tanenbaum of Morrison & Foerster LLP with any questions or comments at 212-468-8163. Thank you for your assistance with this filing.

Sincerely yours,

PROTALIX BIOTHERAPEUTICS, INC.

By: /s/ David Aviezer

Name: David Aviezer

Title: President and Chief Executive Officer

cc: Morrison & Foerster LLP