

**CELLECT BIOTECHNOLOGY LTD.
23 Hata'as Street
Kfar Saba, Israel 44425**

February 7, 2018

VIA EDGAR

Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

**Re: Cellect Biotechnology Ltd.
Registration Statement on Form F-1
File No. 333-222334**

Ladies and Gentlemen:

Pursuant to Rule 461 of the General Rules and Regulations under the Securities Act of 1933, as amended, Cellect Biotechnology Ltd. (the "Company") respectfully requests that the effective date of the registration statement referred to above be accelerated so that it will become effective at 4:00 p.m., Eastern Time, on February 8, 2018, or as soon thereafter as possible.

The Company hereby acknowledges the following:

- should the Securities and Exchange Commission (the "Commission") or the staff, acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- the Company may not assert staff comments and the declaration of effectiveness of this Registration Statement as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

CELLECT BIOTECHNOLOGY LTD.

By: /s/ Eyal Leibovitz
Name: Eyal Leibovitz
Title: Chief Financial Officer
