Cellect Biotechnology Ltd. 23 Hata'as Street Kfar Saba, Israel 44425

July 26, 2016

VIA EDGAR

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

RE: Cellect Biotechnology Ltd. (CIK: 0001671502)

Registration Statement No. 333-212432 on Form F-1 (the "Registration Statement")

Ladies and Gentlemen:

Cellect Biotechnology Ltd. (the "<u>Registrant</u>") hereby requests acceleration of the effectiveness of the above-referenced Registration Statement pursuant to Rule 461 under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), so that it may become effective on July 28, 2016 at 5:00 p.m., Eastern Time, or as soon thereafter as is practicable.

The Registrant acknowledges that:

- should the Securities and Exchange Commission (the "<u>Commission</u>") or its 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 its staff, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- the Registrant 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.

The Registrant understands that the Commission will consider this request for acceleration of the effective date of the Registration Statement as a confirmation of the fact that the Registrant is aware of its responsibilities under the Securities Act as they relate to the proposed public offering of the securities specified in the Registration Statement.

Very truly yours,

CELLECT BIOTECHNOLOGY LTD.

By: <u>/s/ Dr. Shai Yarkoni</u> Dr. Shai Yarkoni, Chief Executive Officer