

May 11, 2007

VIA ELECTRONIC TRANSMISSION AND FACSIMILE

Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-6010

Re: Lixte Biotechnology Holdings, Inc. - Registration Statement on Form SB-2
Registration No. 333-137208

Ladies and Gentlemen:

On behalf of Lixte Biotechnology Holdings, Inc., a Delaware corporation (the "Company"), the undersigned hereby requests that the Securities and Exchange Commission issue an order declaring the above-referenced Registration Statement effective at 4:00 p.m., Washington, D.C. time, on Monday, May 14, 2007, or as soon thereafter as is practicable.

The Company hereby acknowledges that:

1. Should the Commission or the staff, acting pursuant to delegated authority, declare the Registration Statement effective, that act will not foreclose the Commission from taking any action with respect to the filing;
2. 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 disclosures in the Registration Statement; and
3. The Company may not assert staff comments or 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 Company also understands that this request for acceleration will be considered a confirmation of its awareness of its obligations under the Securities Act of 1933 and the Securities Exchange Act of 1934 with respect to the offering of securities pursuant to the Registration Statement.

Very truly yours,

By: /s/ John S. Kovach

John S. Kovach
Chief Executive Officer
Lixte Biotechnology Holdings, Inc.