Q32 Bio Inc. 830 Winter Street Waltham, MA 02451

April 25, 2024

VIA EDGAR

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

> Re: Q32 Bio Inc. Registration Statement on Form S-1 File No. 333-278829 <u>Request for Acceleration</u>

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Act"), Q32 Bio Inc. (the "Company") hereby requests acceleration of the effective date of its Registration Statement on Form S-1 (File No. 333-278829) (the "Registration Statement"), so that it may become effective at 4:00 pm Eastern time on April 29, 2024, or as soon thereafter as practicable, unless we or our outside counsel, Goodwin Procter LLP, request by telephone that such Registration Statement be declared effective at some other time. In making this acceleration request, the Company acknowledges that it is aware of its responsibilities under the Act.

If you have any questions regarding this request, please contact Sarah Ashfaq of Goodwin Procter LLP at (212) 459-7238.

Very truly yours, Q32 BIO INC.

By: /s/ Jodie Morrison

Name: Jodie Morrison Title: Chief Executive Officer

cc: Sarah Ashfaq, Goodwin Procter LLP