



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

May 4, 2011

Mr. Robert P. Jordheim
Chief Financial Officer
RTI Biologics, Inc.
11621 Research Circle
Alachua, Florida 32615

Re: RTI Biologics, Inc.
Form 10-K for the Year Ended December 31, 2010
Filed February 22, 2011
File No. 000-31271

Dear Mr. Jordheim:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief