



DIVISION OF  
CORPORATION FINANCE

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

October 8, 2010

Marc N. Casper  
President and Chief Executive Officer  
Thermo Fisher Scientific, Inc.  
81 Wyman Street  
P.O. Box 9046  
Waltham, MA 02454

**Re: Thermo Fisher Scientific  
Form 10-K for the Fiscal Year Ended December 31, 2009  
Filed February 26, 2010  
File No. 001-8002**

Dear Mr. Casper:

We have completed our review of your Form 10-K for the fiscal year ended December 31, 2009 and related filings and do not, at this time, have any further comments.

Sincerely,

Martin James  
Acting Assistant Director

cc: Seth H. Hoogasian, Esq. – Senior Vice President and General Counsel