

Mail Stop 4720

March 8, 2010

Kent Snyder
President & Chief Executive Officer
Senomyx, Inc.
4767 Nexus Centre Drive
San Diego, California 92121

Re: Senomyx, Inc.
Form 10-K for the year ended December 31, 2008
Filed February 12, 2009
Schedule 14A filed April 20, 2009
File No. 000-50791

Dear Mr. Snyder:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Jeffrey Riedler
Assistant Director