



KnipBio Inc  
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*For immediate release*

## KnipBio Reports Success in Using its BioEngineering Platform to Advance Development of Fish Feed Alternatives

**LOWELL, Mass. (September 6, 2017)** [KnipBio Inc.](#), a Massachusetts-based biotechnology company developing sustainable single cell protein (SCP) alternatives to conventional aquafeed proteins, announced it has completed the development of a novel microorganism capable of providing taurine missing from many commercial fish feeds. Taurine is a sulfonic amino-acid critical to basic cellular and physiological processes such as membrane stabilization, detoxification, anti-inflammation, immunomodulation, and anti-oxidation. The reduced availability in aquaculture diets of taurine-rich ingredients like fishmeal may create a taurine deficiency. This deficiency can lead to reduced growth and survival for many commercially relevant finfish species, increasing their susceptibility to diseases and impairing larval development. The impact on aquaculture of taurine deficiency is significant.

Larry Feinberg, CEO of KnipBio, stated, “We have been refining our synthetic biology toolkit for the past 3 years, with the goal of developing multiple strains of microorganisms capable of producing SCP as protein source alternative that can meet the unique immuno-nutritional needs of specific targeted aquaculture species like salmon and shrimp. By efficient use of gene recombineering we have been able to create and test hundreds of variants of our microorganism in a very short period of time and identify those with a high potential to be a single cell protein food source.”

Feinberg added, “As a demonstration of the power of the company’s synthetic biology tools, our research team undertook the task of developing a microbial strain able to produce taurine in meaningful amounts. Because of our streamlined bioengineering workflow we were able to do so within three months, much less time than originally anticipated. Importantly, our scientists achieved this result while still retaining the microorganism’s ability to produce protein and anti-oxidants at the desired levels. Our proficiency in developing a strain so quickly is an impressive indication of the robustness of our bioengineering platform and research process. We are now using our synthetic biology tools to evaluate dozens more strains that can provide more protein, essential amino acids, useful carotenoids, and other beneficial additives and nutraceuticals to our high-quality alternative protein source.”



**About KnipBio:** ([www.knipbio.com](http://www.knipbio.com), twitter @knipbio)

A Massachusetts-based company pioneering advanced nutritional solutions for animal feeds using innovative biotechnology to develop a range of single cell protein products from non-food feedstocks. KnipBio is committed to maintaining a level of transparency to ensure the best sustainable and environmentally conscious practices. For more information, visit [www.knipbio.com](http://www.knipbio.com) or contact us at [info@knipbio.com](mailto:info@knipbio.com)

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