

## News Release

November 29, 2018  
Carna Biosciences, Inc.

### **Carna Biosciences Launches a New Cell-Based Assay Service**

Carna Biosciences announces today that the company launches a new assay service to investigate compound functions in live cells based on NanoBRET™ technology developed by Promega Corporation headquartered in Wisconsin, USA.

Quantifying kinase inhibitor occupancy, selectivity, affinity, and residence time within the cellular environment where engagement would naturally occur is crucial to predict human kinase engagement potencies more accurately. Quantitative and wide-spectrum kinase profiling services using NanoBRET™ Target Engagement Intracellular Kinase Assay System (Promega) enable researchers to access their compound engagement for a selected intracellular target under physiological conditions.

Residence time analysis is also available with the new assay service provided by Carna. If two compounds have the same IC50 data, the one having a longer residence time is expected to inhibit the target for longer times. Therefore, residence time analysis is increasingly focused as an important parameter to characterize compounds. It is also considered to help predicting the effectiveness of in vivo studies.

Carna starts the contract-based assay service using NanoBRET™ technology on December 3, 2018 for 43 kinds of serine/threonine kinases and four kinds of receptor tyrosine kinases. The number of target kinases will be expanded in the future.

Norio Aikawa, Head of Drug Discovery Support Business at Carna Biosciences said, “While demand for cell-based assay is increasing, we believe that we can contribute to accelerating our customers’ drug discovery by providing cell-based assay services based on the unique technology developed by Promega, the leading company in the field of research reagents based on its emission technology.”

“The NanoBRET™ Live Cell Target Engagement offering at Carna Biosciences is a major advancement for kinase inhibitor research,” says Promega Senior Research Scientist Matt Robers. “Carna is a key knowledge leader in the kinase field, with years of experience in kinase profiling services and internal discovery programs. For the first time, Carna’s clients will be enabled with a technology that can quantify the affinity and residence time of drug molecules against intracellular full-length kinases. Combined with Carna’s comprehensive biochemical assay offering, kinase researchers can now directly compare the inhibition profiles of isolated kinases against their binding properties in the complex environment of a living cell.”

The impact of the new service on Carna's consolidated financial results for the year ending December 31, 2018 will be minor.

For more information, please visit <https://www.carnabio.com/english/product/products-services.html>

### **About Promega Corporation**

Promega Corporation is a leader in providing innovative solutions and technical support to the life sciences industry. The company's 4,000 products enable scientists worldwide to advance their knowledge in genomics, proteomics, cellular analysis, drug discovery and human identification. Founded in 1978, the company is headquartered in Madison, WI, USA with branches in 16 countries and over 50 global distributors. For more information about Promega, visit [www.promega.com](http://www.promega.com).

### **Contact:**

Corporate Planning  
Carna Biosciences, Inc.  
TEL: +81-78-302-7075