

The highly acclaimed stabilized Wnt3a, “Afamin/Wnt3a CM”, now available in high-concentration!

NEW

Afamin/Wnt3a CM (High Concentration)

- Stable Wnt3a activity
- Enables organoid culture with a serum-free medium
- Enables long-term organoid culture
- **Higher density and higher activity compared to former product (J2-001), achieving cost reduction in organoid culture!**

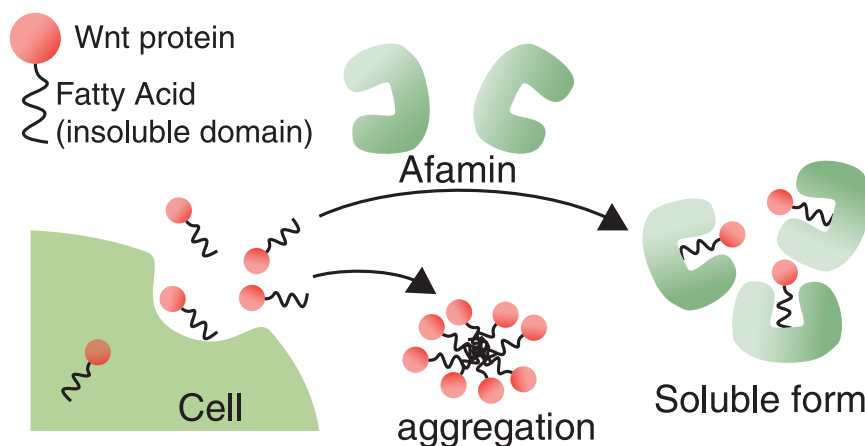


Mechanism of Wnt3a stabilization by Afamin

Wnt3a is a common growth factor for organoid culture; nevertheless, the lipid-soluble Wnt3a protein in serum-free medium tends to aggregate over time, leading to a loss of its activity.

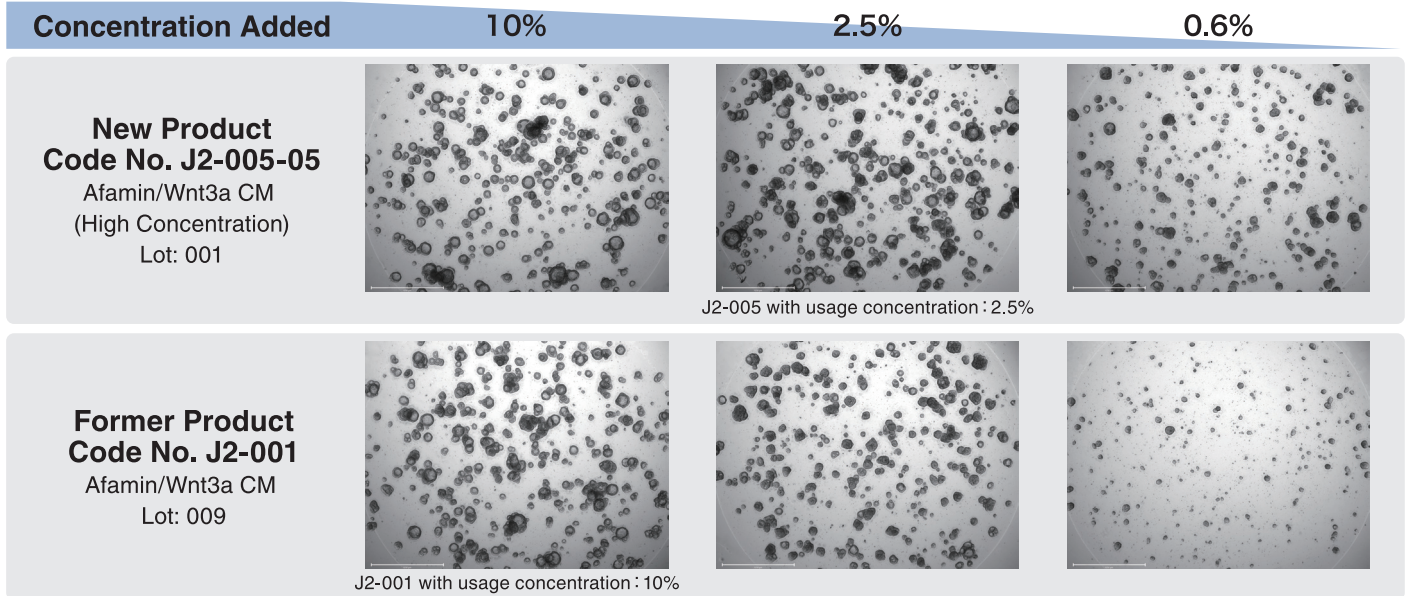
Mihara *et al.* found that Afamin, one of the components of serum, forms a complex with Wnt3a to maintain high Wnt3a activity¹⁾. In addition, the use of the complex of Afamin and Wnt3a in the culture of organoids enabled the long-term culture of organoids.

Overview of Afamin/Wnt3a Complex



Intestinal Organoid Culture Using Afamin/Wnt3a CM

The new product (Code No. J2-005-05) and the former product (Code No. J2-001) were used to culture human small intestine organoids. At a concentration of 2.5%, the former product (Code No. J2-001) showed a decrease in organoid growth (at the bottom). On the other hand, even at an added concentration of 2.5%, the new product maintains robust organoid growth (at the top) (Photos: Human small intestinal organoid culture images after 7 days).



Overview of Afamin/Wnt3a CM (High Concentration)

Code No.	Product Name	Main Components	Package Form	Solvent
J2-005-05	Afamin/Wnt3a CM (High Concentration)	Mouse Wnt3a Human Afamin	5 mL	Expi293™ Expression Medium

Related Products

Afamin/Wnt3a CM is the standard product.

Code No.	Product Name	Main Components	Package Form	Solvent
J2-001	Afamin/Wnt3a CM	Mouse Wnt3a Human Afamin	10 mL	Advanced D-MEM/F-12

Recombinant Afamin/Wnt3a is the composite product of Afamin and Wnt3a.

Code No.	Product Name	Main Components	Package Form	Solvent
J2-002	Recombinant Afamin/Wnt3a	Mouse Wnt3a Human Afamin	60 µg/300 µL	20 mM Tris-HCl (pH7.4), 150 mM NaCl

< Reference >

1) E. Mihara, *et al.*, eLife 5 (2016) [PMID: 26902720]

When culturing organoids, stem cells, or other tissues, if you are to use this product in combination with other factor or factors (hereunder factors), a third party may have a patent on the use or other application of the factors concerned. Regarding to this product, we do not offer any non-infringement warranty when used or otherwise applied in combination with other factors. Therefore, if you intend to use this product in combination with other factors, please check with your organization's division responsible for intellectual property rights or your research agency before using this product.

For research use only. Not for use in diagnostic or therapeutic procedures.
 The information is as of August 2024. Please contact us for the latest information. Please read the data sheets carefully before use.
 Copyright © 2024 MEDICAL & BIOLOGICAL LABORATORIES CO., LTD. All Rights Reserved.

2024.08 156074-24081000