

Reference list of Afamin/Wnt3a CM for organoid culture

Organ		Title	Species	PMID
Salivary Gland	Normal tissue	Kim D <i>et al.</i> 3D Organoid Culture From Adult Salivary Gland Tissues as an ex vivo Modeling of Salivary Gland Morphogenesis. <i>Front Cell Dev Biol.</i> 2021 Aug 12;9:698292.	mouse	34458260
Lung Alveolar	Normal tissue	Ebisudani T <i>et al.</i> Direct derivation of human alveolospheres for SARS-CoV-2 infection modeling and drug screening. <i>Cell Rep.</i> 2021 Jun 8;35(10):109218.	human	34038715
Intestine	Normal tissue	Mihara E <i>et al.</i> Active and water-soluble form of lipidated Wnt protein is maintained by a serum glycoprotein afamin/α-albumin. <i>Elife.</i> 2016 Feb 23;5:e11621.	human	26902720
		Sugimoto S <i>et al.</i> Reconstruction of the Human Colon Epithelium In Vivo. <i>Cell Stem Cell.</i> 2018 Feb 1;22(2):171-176.e5.	human	29290616
		Sugimoto S, Fujii M, Sato T., Organoid Derivation and Orthotopic Xenotransplantation for Studying Human Intestinal Stem Cell Dynamics. <i>Methods Mol Biol.</i> 2020;2171:303-320.	human	32705652
		Sasaki N <i>et al.</i> Development of a Scalable Coculture System for Gut Anaerobes and Human Colon Epithelium. <i>Gastroenterology.</i> 2020 Jul;159(1):388-390.e5.	human	32199883
		Zwiggelaar RT <i>et al.</i> LSD1 represses a neonatal/reparative gene program in adult intestinal epithelium. <i>Sci Adv.</i> 2020 Sep 11;6(37):eabc0367.	human	32917713
		Fujii M <i>et al.</i> Human Intestinal Organoids Maintain Self-Renewal Capacity and Cellular Diversity in Niche-Inspired Culture Condition. <i>Cell Stem Cell.</i> 2018 Dec 6;23(6):787-793.e6.	human	30526881
		Nanki K <i>et al.</i> Somatic inflammatory gene mutations in human ulcerative colitis epithelium. <i>Nature.</i> 2020 Jan;577(7789):254-259.	human	31853059
		Sugimoto S <i>et al.</i> An organoid-based organ-repurposing approach to treat short bowel syndrome. <i>Nature.</i> 2021 Apr;592(7852):99-104.	human	33627870
		De Oliveira T <i>et al.</i> Effects of the Novel PFKFB3 Inhibitor KAN0438757 on Colorectal Cancer Cells and Its Systemic Toxicity Evaluation In Vivo. <i>Cancers (Basel).</i> 2021 Feb 28;13(5):1011.	human	33671096
	Toshimitsu K <i>et al.</i> Organoid screening reveals epigenetic vulnerabilities in human colorectal cancer. <i>Nat Chem Biol.</i> 2022 Jun;18(6):605-614.	human	35273398	
	Tumor	Nishina T <i>et al.</i> Interleukin-11-expressing fibroblasts have a unique gene signature correlated with poor prognosis of colorectal cancer. <i>Nat Commun.</i> 2021 Apr 16;12(1):2281.	mouse	33863879
		Cho YW <i>et al.</i> Patient-derived organoids as a preclinical platform for precision medicine in colorectal cancer. <i>Mol Oncol.</i> 2022 Jun;16(12):2396-2412.	human	34850547
		Toshimitsu K <i>et al.</i> Organoid screening reveals epigenetic vulnerabilities in human colorectal cancer. <i>Nat Chem Biol.</i> 2022 Jun;18(6):605-614.	human	35273398
Hepatopancreatobiliary	Tumor	Wang Z <i>et al.</i> Lactate promotes the growth of patient-derived organoids from hepatopancreatobiliary cancers via ENO1/HIF1α pathway and does not affect their drug sensitivities. <i>Cell Death Discov.</i> 2022 Apr 20;8(1):214.	human	35443744
Kidney	Tumor	Cao C <i>et al.</i> Phenotypical screening on metastatic PRCC-TFE3 fusion translocation renal cell carcinoma organoids reveals potential therapeutic agents. <i>Clin Transl Oncol.</i> 2022 Jul;24(7):1333-1346.	human	35118587
Stomach	Normal tissue	Nanki K <i>et al.</i> Divergent Routes toward Wnt and R-spondin Niche Independency during Human Gastric Carcinogenesis. <i>Cell.</i> 2018 Aug 9;174(4):856-869.e17.	human	30096312

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Stomach	Tumor	Nanki K <i>et al.</i> Divergent Routes toward Wnt and R-spondin Niche Independency during Human Gastric Carcinogenesis, <i>Cell</i> . 2018 Aug 9;174(4):856-869.e17.	human	30096312
		Togasaki K <i>et al.</i> Wnt Signaling Shapes the Histologic Variation in Diffuse Gastric Cancer. <i>Gastroenterology</i> . 2021 Feb;160(3):823-830.	human	33217450
Pancreas	Normal tissue	Seino T <i>et al.</i> Human Pancreatic Tumor Organoids Reveal Loss of Stem Cell Niche Factor Dependence during Disease Progression, <i>Cell Stem Cell</i> . 2018 Mar 1;22(3):454-467.e6.	human	29337182
	Tumor	Seino T <i>et al.</i> Human Pancreatic Tumor Organoids Reveal Loss of Stem Cell Niche Factor Dependence during Disease Progression, <i>Cell Stem Cell</i> . 2018 Mar 1;22(3):454-467.e6.	human	29337182
		Miyabayashi K <i>et al.</i> Intraductal Transplantation Models of Human Pancreatic Ductal Adenocarcinoma Reveal Progressive Transition of Molecular Subtypes, <i>Cancer Discov</i> . 2020 Oct;10(10):1566-1589.	human	32703770
		Farshadi EA <i>et al.</i> Organoids Derived from Neoadjuvant FOLFIRINOX Patients Recapitulate Therapy Resistance in Pancreatic Ductal Adenocarcinoma. <i>Clin Cancer Res</i> . 2021 Dec 1;27(23):6602-6612.	human	34580113
		Ikezawa K <i>et al.</i> Establishment of organoids using residual samples from saline flushes during endoscopic ultrasound-guided fine-needle aspiration in patients with pancreatic cancer. <i>Endosc Int Open</i> . 2022 Jan 11;10(1):E82-E87.	human	35036290
Ureteric Bud	iPSC-Derived	Mae SI <i>et al.</i> Expansion of Human iPSC-Derived Ureteric Bud Organoids with Repeated Branching Potential, <i>Cell Rep</i> . 2020 Jul 28;32(4):107963.	human	32726627
Ovary	Tumor	Nanki Y <i>et al.</i> Patient-derived ovarian cancer organoids capture the genomic profiles of primary tumours applicable for drug sensitivity and resistance testing, <i>Sci Rep</i> . 2020 Jul 28;10(1):12581.	human	32724113
Gastroenteropancreatic neuroendocrine neoplasms (GEP-NENS)		Kawasaki K <i>et al.</i> An Organoid Biobank of Neuroendocrine Neoplasms Enables Genotype-Phenotype Mapping, <i>Cell</i> . 2020 Nov 25;183(5):1420-1435.e21.	human	33159857

- In some literatures above, home-prepared Afamin/Wnt3a CM is used. Therefore, the concentration might be different from MBL recommendation.
- MBL is manufacturing and selling Afamin/Wnt3a CM under strict quality control with exclusive commercial use license.

Afamin/Wnt3a CM

for Organoid culture



Product Highlight

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

Related Product: Recombinant Afamin/Wnt3a

Recombinant Afamin/Wnt3a was purified from the culture supernatant of CHO-K1 cells co-expressing Afamin and Wnt3a.

Code No.	Product Name	Main Components	Size	Solvent
J2-002	Recombinant Afamin/Wnt3a	Mouse Wnt3a Human Afamin	60 µg/300 µL	20 mM Tris-HCl (pH 7.4), 150 mM NaCl

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.

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