



**Department of Livestock Development  
Ministry of Agriculture and Cooperatives**

This is to certify that

**BETAGRO SCIENCE CENTER CO., LTD. (Lop Buri)**

**219 Moo 1, Chongsarika, Patthananiikom, Lop Buri, 15220 Thailand.**

**Has been designated as livestock products analysis laboratory by Department of Livestock Development**

**Registered Testing Scopes are as follows**

**Designation code 007-54(1)/10-2565**

**Date of issue 7 July 2022**

**Valid until 6 July 2025**

.....  
**(DR.SOPAT CHAVALKUL, DVM.)**

**DEPUTY DIRECTOR GENERAL**

**DEPARTMENT OF LIVESTOCK DEVELOPMENT**

**FOR DIRECTOR GENERAL**




Registration of Testing Scope for designation on Livestock products analysis  
by Department of Livestock Development

Name of Laboratory : BETAGRO SCIENCE CENTER CO., LTD. (Lop Buri)  
Address : 219 Moo 1, Chongsarika, Patthananiikom, Lop Buri,  
15220 Thailand.  
Designation Code : 007-54(1)/10-2565

Type of Sample	Test	Method
1. Meat and meat products (Fresh, Chilled, Frozen, Heat Treated, Processed)	<i>Clostridium perfringens</i> (CFU, Detected or not detected)	FDA BAM <i>Online</i> , 2001 (Chapter 16)
	Coliforms (MPN)	FDA BAM <i>Online</i> , 2020 (Chapter 4)
	<i>E.coli</i> (MPN)	
	<i>Listeria monocytogenes</i> (Detected or not detected)	AFNOR Certificate No. BIO 12/11-03/04
		ISO 11290-1: 2017
	<i>Staphylococcus aureus</i> (CFU)	AOAC (2019) 2003.11
Yeasts (CFU)	ISO 21527-1: 2008	
Molds (CFU)	ISO 21527-2: 2008	
Yeasts and Molds (CFU)		
2. Poultry neck skin	<i>Campylobacter</i> spp. (CFU)	ISO 10272-2 : 2017

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Type of Sample	Test	Method
3. - Meat and meat products (Fresh, Chilled, Frozen, Processed) - Egg and egg products (Fresh, Chilled, Frozen, Processed) - Ready to Eat Foods (with livestock ingredient) - Ready to Cook Foods (with livestock ingredient) - Semi processed Foods (with livestock ingredient)	Enterococci (CFU)	Compendium of Methods for the Microbiological Examination of Foods, (APHA), 5 <sup>th</sup> Edition, 2015 (Chapter 10) NordVal Certificate No.047
	Total Viable Count 30 °C (CFU)	ISO 4833-1 : 2013
	Total Viable Count 35 °C (CFU)	AOAC RI Certificate No. 010404 Compendium of Methods for the Microbiological Examination of Foods, (APHA), 5 <sup>th</sup> edition, 2015 (Chapter 8)
	<i>Salmonella</i> spp. (Detected or not detected)	ISO 6579-1 : 2017/Amd.1 : 2020 (E)
		AFNOR Certificate No. : UNI 03/07-11/13
		AFNOR Certificate No. BIO 12/16-09/05 AFNOR Certificate number : BIO 12/38-06/16
	<i>Staphylococcus aureus</i> (CFU)	ISO 6888-1 : 2021 (Coagulase-positive staphylococci) FDA BAM <i>Online</i> , 2016 (Chapter 12) (Biochemical test)
		NordVal Certificate No.042

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Type of Sample	Test	Method
3. - Meat and meat products (Fresh, Chilled, Frozen, Processed) - Egg and egg products (Fresh, Chilled, Frozen, Processed) - Ready to Eat Foods (with livestock ingredient) - Ready to Cook Foods (with livestock ingredient) - Semi processed Foods (with livestock ingredient) (Continued)	Coliforms (CFU)	Compact Dry EC, AOAC RI Certificate No. 110402
	<i>E. coli</i> (CFU)	
	Coliforms (CFU, MPN)	Compendium of Methods for the Microbiological Examination of Foods, (APHA), 5 <sup>th</sup> edition 2015 (Chapter 9)
	<i>E. coli</i> (CFU, MPN)	
	Yeasts (CFU)	Compendium of Methods for the Microbiological Examination of Foods, (APHA), 5 <sup>th</sup> Edition 2015 (Chapter 21)
	Molds (CFU)	
Yeasts and Molds (CFU)	AOAC (2019) 2014.05	
Enterobacteriaceae (CFU)	Compendium of Methods for the Microbiological Examination of Foods, (APHA), 5 <sup>th</sup> Edition, 2015 (Chapter 9)	

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Type of Sample	Test	Method
4. Meat and Animal organ (Fresh, Chilled, Frozen)	Detection of Anti-Bacterial substance residues (Screening test) (Detected or not detected)	In-house method TI-B00-017 by six-plate agar diffusion assay
5. - Feeding stuffs - Raw materials - Pet food	Protein	In-house method TI-C00-016 based on ISO 5983-2 : 2009
	Moisture	ISO 6496 : 1999
	Fat	In-house method TI-C00-015 based on AOAC (2019) 920.39
		In-house method TI-C00-097 based on AOCS (2010) Am 5-04
	Fat (Acid hydrolysis)	In-house method TI-C00-027 based on ISO 6492 : 1999
	Ash	AOAC (2019) 942.05
	Fiber	In-house method TI-C00-040 based on AOAC (2019) 978.10
		In-house method TI-C00-092 based on AOCS (2016) Ba 6a-05
	Sodium Chloride (NaCl)	In-house method TI-C00-020 based on ISO 6495 : 1999
Crude protein	AOAC (2019) 990.03	

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Type of Sample	Test	Method
6. Animal Fat	Organochlorine : - Aldrin - Dieldrin - Endrin - Heptachlor - Heptachlor epoxide - trans-Chlordane - Hexachlorobenzene - alpha-BHC - beta-BHC - gamma-BHC - Oxychlordane - cis-chlordane - 4,4'DDE - 2,4'DDT - 4,4'DDD - 4,4'DDT	In-house method TI-C00-001 based on Journal AOAC, Vol. 67, No. 2 (1984)

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Remark

If there are further scientific evidences convincing that any rapid method, proprietary method or alternative method has drawback which might affect the testing validity or inappropriate for livestock product exports testing, the Department of livestock development may withdraw such certified scope of testing.

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