



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

This is to certify that

**BETAGRO SCIENCE CENTER COMPANY LIMITED, SCIENCE PARK**

**136 Moo 9, Klong Nueng, Klong Luaung, Pathumthani, 12120 Thailand.**

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

**Registered Testing Scopes are as follows**

**Designation code 009-54(1)/10-2565**

**Date of issue 10 May 2022**

**Valid until 9 May 2025**

*S. Chavalkul*

**(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 COMPANY LIMITED,  
SCIENCE PARK  
Address : 136 Moo 9, Klong Nueng, Klong Luaung, Pathumthani,  
12120 Thailand.  
Designation Code : 009-54(1)/10-2565

Type of Sample	Test	Method
1. Meat and Meat Products (Fresh, Frozen, Chilled, Heat Treated, Processed) - Ready-to-eat (with livestock ingredient) - Ready-to-cook (with livestock ingredient) - Semi processed Food (with livestock ingredient)	Aerobic Plate Count (CFU)	Compendium of Methods for the Microbiological Examination of Foods. 2015. 5 <sup>th</sup> Edition. Chapter 8.
	Enterococci (CFU)	NordVal International Certificate No.047
	Coliforms (MPN)	ISO 4831 : 2006
	<i>Salmonella</i> spp. (Detected or Not Detected)	AFNOR Certificate No. BIO 12/10-09/02 ISO 6579-1 : 2017/Amd.1 : 2020
	<i>Listeria monocytogenes</i> (Detected or Not Detected)	AFNOR Certificate No. BIO 12/11-03/04. ISO 11290-1 : 2017
	<i>Escherichia coli</i> (MPN)	FDA BAM Online, 2020. (Chapter 4)
	<i>Staphylococcus aureus</i> (MPN)	FDA BAM Online, 2016. (Chapter 12)
	<i>Clostridium perfringens</i> (CFU, Detected or Not Detected)	FDA BAM Online, (2001). (Chapter 16)
	Yeasts and Molds (CFU)	AOAC (2019) 997.02

Date of issue : 10 May 2022

Valid unit : 9 May 2025

Signed.....

(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 COMPANY LIMITED,  
SCIENCE PARK  
Address : 136 Moo 9, Klong Nueng, Klong Luaung, Pathumthani,  
12120 Thailand.  
Designation Code : 009-54(1)/10-2565

Type of Sample	Test	Method
2. - Ready-to-eat (with livestock ingredient) - Ready-to-cook (with livestock ingredient) - Semi processed Food (with livestock ingredient)	Coliforms (CFU)	AOAC (2019) 991.14
	<i>Escherichia coli</i> (CFU)	
	Enterobacteriaceae (CFU)	AOAC (2019) 2003.01
	<i>Enterococcus</i> spp. (CFU)	Compendium of Methods for the Microbiological Examination of Foods. 2015. 5 <sup>th</sup> Edition. Chapter 10.
3. Meat and Meat Products (Fresh, Frozen, Chilled, Heat Treated, Processed)	Coliforms (CFU)	AOAC (2019) 998.08
	<i>Escherichia coli</i> (CFU)	
	<i>Staphylococcus aureus</i> (CFU)	AOAC (2019) 2003.11

Date of issue : 10 May 2022  
Valid unit : 9 May 2025

Signed.....  
(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 COMPANY LIMITED,  
SCIENCE PARK  
Address : 136 Moo 9, Klong Nueng, Klong Luaung, Pathumthani,  
12120 Thailand.  
Designation Code : 009-54(1)/10-2565

Type of Sample	Test	Method
4. Egg and Egg Products	<i>Salmonella</i> spp. (Detected or Not Detected)	AFNOR Certificate No. BIO 12/10-09/02 ISO 6579-1 : 2017/Amd.1 : 2020
	Aerobic Plate Count (CFU)	Compendium of Methods for the Microbiological Examination of Foods. 2015. 5 <sup>th</sup> Edition. Chapter 8.
	Coliforms (MPN)	ISO 4831 : 2006
	<i>Staphylococcus aureus</i> (CFU)	FDA BAM <i>Online</i> , 2016. (Chapter 12)
5. Animal feed and Feeding Stuff	Aerobic Plate Count (CFU)	AFNOR Certificate number 3M 01.01-09.89
	<i>Salmonella</i> spp. (Detected or Not Detected)	ISO 6579-1 : 2017/Amd.1 : 2020 AFNOR Certificate No. BIO 12/10-09/02
	Yeasts and Molds Count (CFU)	AFNOR Certificate reference No. 3M 01.13-07.14
	Total Aflatoxin	AgraQuant Total Aflatoxin Assay 4/40 ELISA kit, Article No. 10002098/10002099 issued version No. 12, 2019 by ELISA Technique.

Date of issue : 10 May 2022  
Valid unit : 9 May 2025

Signed.....  
(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 COMPANY LIMITED,  
SCIENCE PARK  
Address : 136 Moo 9, Klong Nueng, Klong Luaung, Pathumthani,  
12120 Thailand.  
Designation Code : 009-54(1)/10-2565

Type of Sample	Test	Method
5. Animal feed and Feeding Stuff (Continued)	Aflatoxin (B1, B2, G1, G2) and Total Aflatoxin	In-house method TI-C00-179 based on AOAC (2019) 991.31. by HPLC-FLD Technique
6. Meat (Pig, Chicken), Animal Liver and Meat Products (Fresh, Frozen, Chilled, Heat Treated, Processed)	Chloramphenicol	In-house Method TI-C00-002 based on Journal of Chromatography B, 791; 2003, page 31-38 by LC-MS/MS Technique EuroProxima CHLORAMPHENICOL ELISA (5091CAP) by ELISA technique.
	Nitrofurans Metabolites: (Tissue-bound residue) 1. AHD (1-aminohydantoin) 2. SEM (semicarbazide) 3. AOZ (3-amino-2-oxazolidinone) 4. AMOZ (3-amino-5-morpholinomethyl -2-oxazolidinone)	In-house Method TI-C00-001 based on Journal of Chromatography B, 691; 1997, page 87-94 by LC-MS/MS Technique.

Date of issue : 10 May 2022  
Valid unit : 9 May 2025

Signed.....*S. Chavalkul*.....  
(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 COMPANY LIMITED,  
SCIENCE PARK  
Address : 136 Moo 9, Klong Nueng, Klong Luaung, Pathumthani,  
12120 Thailand.  
Designation Code : 009-54(1)/10-2565

Type of Sample	Test	Method
7. Meat (Pig, Chicken), Animal Liver, Animal Urine, Animal Organs and Meat Products (Fresh, Chilled, Frozen, Heat Treated, Processed)	Beta-agonist : 1. Clenbuterol 2. Salbutamol 3. Ractopamine	In-house Method TI-C00-054 based on Journal of Chromatography A, 750 ; 1996, page 43-49 by LC-MS/MS Technique
8. Pig Urine	Beta-agonist : 1. Clenbuterol 2. Salbutamol 3. Ractopamine	In-house Method TI-C00-198 based on Journal of Chromatography A, 750 ; 1996, page 43-49 by LC-MS/MS (Q-Trap) Technique
9. Pig Serum	Sulfamethazine (or Sulfadimidine)	In-house Method TI-C00-145 based on Immunoaffinity column of Sulfonamides (IAC-SULF) Instruction Manual (C/N : IAC 305A) by LC-MS/MS Technique In-house Method TI-C00-199 based on Immunoaffinity column of Sulfonamides (IAC-SULF) Instruction Manual (C/N : IAC 305A) by LC-MS/MS (Q-Trap) Technique.

Date of issue : 10 May 2022  
Valid unit : 9 May 2025

Signed.....  
(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 COMPANY LIMITED,  
SCIENCE PARK  
Address : 136 Moo 9, Klong Nueng, Klong Luaung, Pathumthani,  
12120 Thailand.  
Designation Code : 009-54(1)/10-2565

Type of Sample	Test	Method
10. Dog Chew	<i>Salmonella</i> spp.	ISO 6579-1 : 2017/Amd.1 : 2020
		AFNOR Certificate No. BIO 12/10-09/02
	<i>Enterobacteriaceae</i>	NF Validation Certification No. 3M 01.06-09.97
11. Meat (Pig, Chicken) and Meat Products (Fresh, Frozen, Chilled, Heat Treated, Processed)	Chloramphenicol	In-house Method TI-C00-193 based on Journal of Chromatography B, 791: 2003, page 31-38 by LC-MS/MS (Q-Trap) Technique.

**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.

Date of issue : 10 May 2022

Valid unit : 9 May 2025

Signed.....

(DR.SOPAT CHAVALKUL, DVM.)

DEPUTY DIRECTOR GENERAL

DEPARTMENT OF LIVESTOCK DEVELOPMENT

FOR DIRECTOR GENERAL