

REPUBLIC OF TURKEY HALAL ACCREDITATION AGENCY

HALAL ACCREDITATION CERTIFICATE

Laboratory Performing Halal Testing

TUBITAK MARMARA RESEARCH CENTER

Address: Barış Mahallesi Dr. Zeki Acar Caddesi No:1 P.K. 21, Gebze/KOCAELİ

Accredited in accordance with the OIC/SMIIC 35:2020 Standard for the attached scope.

Halal Accreditation Number 2023-027

Halal Accreditation Scope

Shown in annex

Initial Halal Accreditation Date

Expiry Date

24.03.2023

24.03.2028

This certificate is valid with the halal accreditation scope until the expiry date, as long as the laboratory fully complies with the OIC/SMIIC 35:2020 Standard, national legislation and Halal Accreditation Agency rules.

Zafer SOYLU
Chairman of the Board



Testing Fields-Tested Materials/ Products	Name of Test	Testing Method (national, international standards, inhouse methods)
Food Feed and seeds	GMO Screening assay (p35S, tNOS, pFMV) Real-time PCR Method Pretreatment: DNA Extraction	JRC Compendium of Reference Methods for GMO Analysis (QL-ELE-00-013, QL-ELE-00-015), ISO 21569, ISO 24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit user manual), ISO 21571
Food Feed and seeds	GMO Screening assay (p35S, tNOS, FMV) Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (Surefood GMO 35S + NOS+FMV Screening Real-Time PCR Kit Manuel), ISO 21569, ISO 24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit user manual), ISO 21571
Meat and Meat Products	Meat species identification (screening of pig meat) Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (Fluorion Meat Species Identification QLP 1.0 Kit Manuel) Kit Method (Genespin DNA Extraction Kit
Food Feed and seeds	GMO Screening assay (p35S, tNOS, FMV) Real-time PCR Method Pretreatment: DNA Extraction	user manual) Kit Method (Biotecon Diagnostics Foodproof Kit) ISO 21569, ISO 24276) Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit user manual), ISO 21571





Testing Fields-Tested Materials/ Products	Name of Test	Testing Method (national, international standards, inhouse methods)
Food Feed and seeds	Plant specific soy gene screening Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (SureFood GMO Plant 4 plex Corn/soya/cotton/canola Test Kit), ISO 21569, ISO 24276 Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571
Food Feed and seeds	Plant specific cotton gene screening Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (SureFood GMO Plant 4 plex Corn/soya/cotton/canola Test Kit), ISO 21569, ISO 24276 Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571
Food Feed and seeds	MON87701 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (SureFood GMO ID 4plex Soya Test Kit) ISO 21569, ISO 24276 Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571
Food Feed and seeds	MON87708 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (SureFood GMO ID 4plex Soya Test Kit) ISO 21569, ISO 24276 Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571





Testing Fields-Tested Materials/ Products	Name of Test	Testing Method (national, international standards, inhouse methods)
Food Feed and seeds	MON87769 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (SureFood GMO ID 4plex Soya Test Kit) ISO 21569, ISO 24276 Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571
Food Feed and seeds		Kit Method (SureFood GMO ID 4plex Soya Test Kit) ISO 21569, ISO 24276 Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571
Food Feed and seeds	DP 305423 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (SureFood GMO ID 4plex Soya Test Kit) ISO 21569, ISO 24276 Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample
Food Feed and seeds	281-24-36 cotton Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	preparation kit III), ISO 21571 Kit Method (Eurofins GMOIdent RT 281-24-236 COTTON Test Kit) ISO 21569, ISO 24276 Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571

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Testing Fields-Tested Materials/ Products	Name of Test	Testing Method (national, international standards, inhouse methods)
Food Feed and seeds	3006-210-23 cotton Type identification assay Real-time PCR Method	Kit Method (Eurofins GMOIdent RT 3006-210-23 COTTON Test Kit) ISO 21569, ISO 24276
	Pretreatment: DNA Extraction	Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571
Food Feed and seeds	GHB614 cotton Type identification assay Real-time PCR Method	Kit Method (Eurofins GMOIdent RT GHB614 COTTON Test Kit) ISO 21569, ISO 24276
	Pretreatment: DNA Extraction	Kit Method (Genespin DNA Extraction Kit user manual, Biotecon Foodproof sample preparation kit III), ISO 21571
Beef and beef products	Offal and foreign tissue determination assay. Reverse Transcriptase PCR method	In-house method (D.05.G514/01)
Hazelnut and hazelnut products	Hazelnut protein assay ELISA Method	R-Biofarm RIDASCREEN FAST Hazelnut Art. No. R6802 Kit Prosedürü
Food Food and	Plant specific corn gene screening Real-time PCR Method	Kit Method (SureFood GMO Plant 4 plex Corn/soya/cotton/canola Test Kit), ISO 21569, ISO 24276
	Pretreatment: DNA Extraction	Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571



Testing Fields-Tested Materials/ Products	Name of Test	Testing Method (national, international standards, inhouse methods)
Food Feed and seeds	DAS40278-9 corn Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-ZM-004), ISO 21569, ISO 24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571
Processed food and food additives	Porcine DNA screening assay Real- time PCR Method Pretreatment: DNA Extraction	Kit Method (Biotecon Foodproof Porcine Detection LyoKit) Kit Method (Biotecon Foodproof Sample Preparation Kit III); İn-house method-"D.05.G348-5/00"
Processed food and food additives	Porcine DNA screening assay Real- time PCR Method Pretreatment: DNA Extraction	In-house method- "D.05.G423/03" Kit Method (Biotecon Foodproof Sample Preparation Kit III); İn-house method-"D.05.G348-5/00"
Processed food and food additives	Plant specific sugar beet gene screening Real time PCR Method Pretreatment: DNA Ekstraksiyonu	In-house method- "D.05.G481-1/00" In-house method-"D.05.G348- 5/00"
Food Feed and seeds	GMO Screening assay (p35S, tNOS, FMV) Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (Surefood GMO Screen 4plex 35S/NOS/FMV+IAC Real-Time PCR Kit Manuel), ISO 21569, ISO 24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571





Testing Fields-Tested Materials/ Products	Name of Test	Testing Method (national, international standards, inhouse methods)
Food Feed and seeds	DAS-44406-6 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-GM- 015), ISO21569, ISO24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571
Food Feed and seeds	DAS-68416-4 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-GM- 013), ISO 21569, ISO 24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571
Food Feed and seeds	DAS-81419-2 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-GM- 014), ISO21569, ISO24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571
Cow milk	Beta Casein A1 protein assay ELISA Method	GeneTel Laboratories LLC, A1 Casein ELISA Kit Protocol Kit user manual
Cow milk	Beta Casein A2 protein assay ELISA Method	GeneTel Laboratories LLC, A2 Casein ELISA Kit Protocol Kit user manual
Food Feed and seeds	MON87751 Soya Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-GM- 016), ISO21569, ISO24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571

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Testing Fields-Tested Materials/ Products	Name of Test	Testing Method (national, international standards, inhouse methods)
Food Feed and seeds	DP305423 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-GM- 008), ISO21569, ISO24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571
Food Feed and seeds	CV127 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-GM- 011), ISO21569, ISO24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571
Food Feed and seeds	MON87708 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-GM- 012), ISO21569, ISO24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571
Food Feed and seeds	MON87701 Soy Type identification assay Real-time PCR Method Pretreatment: DNA Extraction	EURL Method (QT-EVE-GM- 010), ISO21569, ISO24276 Kit Method (Biotecon Foodproof sample preparation kit III, Genespin DNA Extraction Kit), ISO 21571
Food Feed and seeds	GMO Screening assay (p35S, tNOS, FMV) Real-time PCR Method Pretreatment: DNA Extraction	Kit Method (GEN-IAL genControl RT Triplex IV plus plant kit), ISO21569, ISO24276

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