This is a free page sample. Access the full version online.

NSAI Standards

Irish Standard
I.S. EN 15634-2:2019

Foodstuffs - Detection of food allergens by molecular biological methods - Part 2: Celery (Apium graveolens) - Detection of a specific DNA sequence in cooked sausages by real-time PCR

© CEN 2019 No copying without NSAI permission except as permitted by copyright law.

This is a free page sample. Access the full version online.

I.S. EN 15634-2:2019

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:	*Published:*
EN 15634-2:2019	2019-10-02

This document was published under the authority of the NSAI and comes into effect on:	ICS number:
2019-10-21	07.100.30 67.120.10 NOTE: If blank see CEN/CENELEC cover page

NSAI	T +353 1 807 3800	Sales:
1 Swift Square,	F +353 1 807 3838	T +353 1 857 6730
Northwood, Santry	E standards@nsai.ie	F +353 1 857 6729
Dublin 9	W NSAI.ie	W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

National Foreword

I.S. EN 15634-2:2019 is the adopted Irish version of the European Document EN 15634-2:2019, Foodstuffs - Detection of food allergens by molecular biological methods - Part 2: Celery (Apium graveolens) - Detection of a specific DNA sequence in cooked sausages by real-time PCR

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This is a free page sample. Access the full version online.

This page is intentionally left blank

This is a free page sample. Access the full version online.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 15634-2

October 2019

ICS 07.100.30; 67.120.10

Supersedes CEN/TS 15634-2:2012

English Version

Foodstuffs - Detection of food allergens by molecular biological methods - Part 2: Celery (Apium graveolens) - Detection of a specific DNA sequence in cooked sausages by real-time PCR

Produits alimentaires - Détection des allergènes alimentaires par des méthodes d'analyse de biologie moléculaire - Partie 2 : Céleri (Apium graveolens) - Détection d'une séquence d'ADN spécifique dans des saucisses cuites par PCR en temps réel

Lebensmittel - Nachweis von Lebensmittelallergenen mit molekularbiologischen Verfahren - Teil 2: Sellerie (Apium graveolens) - Nachweis einer spezifischen DNA-Sequenz in Brühwürsten mittels Real-time-PCR

This European Standard was approved by CEN on 12 August 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

© 2019 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 15634-2:2019 E

This is a free page sample. Access the full version online.

Contents

Page

European foreword 3
Introduction 4
1 Scope 5
2 Normative references 5
3 Terms and definitions 5
4 Principle 5
5 Reagents 6
6 Apparatus and equipment 7
7 Procedure 8
8 Expression of results 13
9 Validation 13
10 Test report 19
Bibliography 20

This is a free page sample. Access the full version online.

European foreword

This document (EN 15634-2:2019) has been prepared by Technical Committee CEN/TC 275 “Food analysis - Horizontal methods”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TS 15634-2:2012.

Significant technical changes between this standard and CEN/TS 15634-2:2012 are as follows:

a) the document was converted from a Technical Specification into a European Standard;

b) normative references added (2);

c) expression of results (8) updated;

d) requirements regarding the test report added (10)

e) updated bibliography.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

This is a free page sample. Access the full version online.

Introduction

For the use of this document the term:

— ‘shall’ indicates a requirement;

— ‘should’ indicates a recommendation;

— ‘may’ indicates a permission; and

— ‘can’ indicates a possibility and/or a capability.

This is a free page sample. Access the full version online.

1 Scope

This document specifies a method for the detection of celery (*Apium graveolens*) in emulsion-type sausages (e.g. Frankfurter, Wiener).

Real-time PCR (polymerase chain reaction) detection of celery is based on an 101 bp (base pair) sequence from the gene of the mannitol dehydrogenase (GenBank Acc. No. AF067082[1)] of celery (*Apium graveolens*).

The method has been validated on emulsion-type sausages (Bavarian "Leberkäse") spiked with celery. For this purpose meat batter containing mass fractions of 50 % pork meat, 25 % pork fat, 23 % crushed ice and 1,8 % of a mixture of sodium chloride, nitrite, nitrate, phosphates and ascorbates was prepared according to a standard procedure for emulsion-type sausage. The meat batter was spiked with either ground celery seeds or celery root powder to 1000 mg/kg. Lower spiking levels were obtained by diluting with celery-free meat batter. The batter was stuffed into casings and heated at 65 °C for 60 min [1].

This document is intended to be used in addition to EN 15842 and EN 15634-1.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 15634-1:2019, *Foodstuffs — Detection of food allergens by molecular biological methods — Part 1: General considerations*

EN 15842, *Foodstuffs - Detection of food allergens - General considerations and validation of methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15842 and EN 15634-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

4 Principle

Total DNA from emulsion-type sausages is isolated from the sample using a cetyltrimethylammonium bromide (CTAB) method. Potential PCR inhibitors are removed from the DNA extracted by purification with solid phase columns. Real-time PCR is used to detect a celery specific sequence. The real time PCR method involves a fluorescence detection with a sequence specific hydrolysis probe [1], [2].

1) NCBI-GeneBank® is an example of a suitable search tool for free use. This information is given for the convenience of users of this document and does not constitute an endorsement by CEN.

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation