

Detection of *Trichinella* in meat according to EU Regulation 2015/1375

Meat of domestic swine, wild boar, horses and other animal species may be infested with nematodes of the genus *Trichinella*.

Consumption of meat infested with *Trichinella* can cause **serious disease** (trichinosis) in humans and even cause death. Measures should be put in place to prevent human disease caused by the consumption of meat infested with *Trichinella*.

The **Commission Regulation (EU) 2015/1375** of 10 August 2015 establishes specific rules on **official controls** for *Trichinella* in meat.

Various laboratory methods have been approved for the detection of *Trichinella* in fresh meat.

In the Annex I of this Regulation is established the reference detection method and the reagents to be used.

This method is based on **digestion** of fresh meat and the cysts containing the *Trichinella* larvae using a solution of pepsin in acid medium. The released larvae are examined in the trichinoscope or in the stereo-microscope.



Trichinella spiralis



PanReac AppliChem offers the two reagents used in this method:

- **Pepsin 1:10.000 NF** (US National Formulary) corresponding to 1:12.500 BP (British Pharmacopoeia) and to 2.000 FIP (Fédération internationale de pharmacie), or stabilised **Liquid Pepsin** with minimum 660 European Pharmacopoeia units/ml.
- **Hydrochloric Acid 25%**

There are several **critical control points** that can affect in the reliability of the results. One of the most important points is the **quality of the pepsin**.

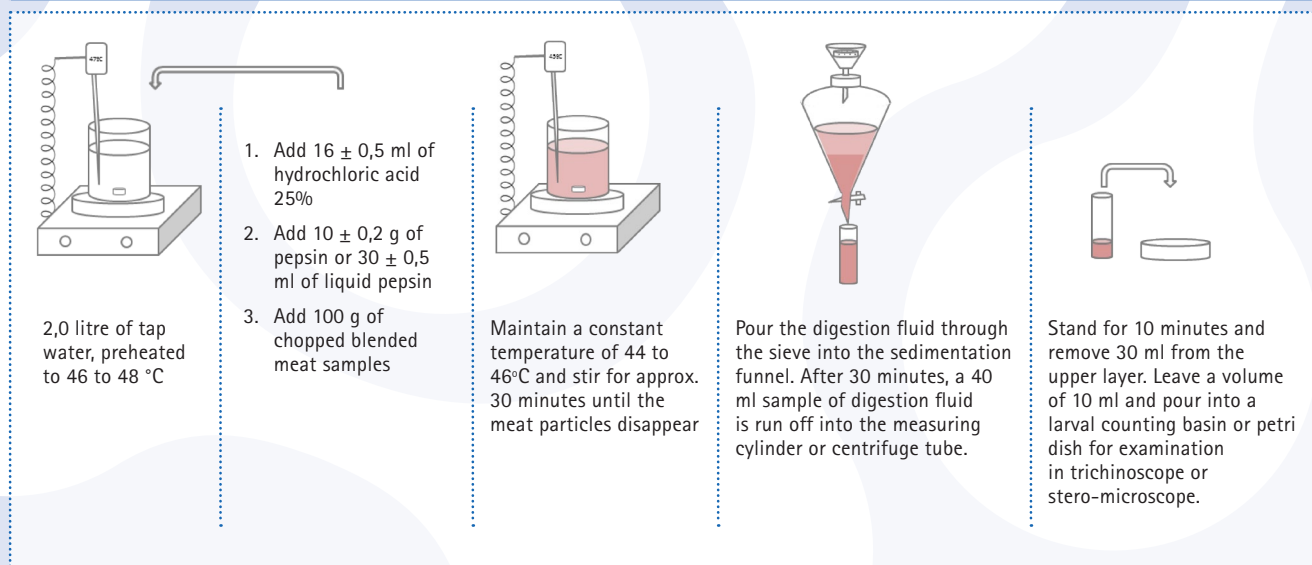
We control two important parameters that can affect in the analysis:

- The **proteolytic activity** which must be **according to the Regulation** to assure a **complete digestion** and to **avoid possible false negative results**.
- A **very low insoluble matter** in water to allow a **clear larvae visualisation**.





IP-036EN;201706

Scheme of the reference detection method



Comparative of Pepsin 1:10.000 NF (code 175208) of PanReac AppliChem and another Competitor (specified and actual value).

Determination	Specified value		Actual value	
	PanReac AppliChem	Competitor	PanReac AppliChem	Competitor
Identity	IR passes test	---	IR passes test	---
pH of 5% solution	3-5	4-5,5	4,2	4
Proteolytic Activity	1:10.000 NF	1:10.000 NF	1:10.000 NF	1:5.000 NF
Insoluble matter in H ₂ O	Passes test	---		

Ordering information

Description	PanReac AppliChem	Packaging
Hydrochloric Acid 25% for analysis, ISO	133378.1611	1000 ml
	133378.1612	2,5 L
	133378.1214	5 L
Liquid Pepsin	176408.1214	5 L
Pepsin 1:10.000 NF	175208.0011	1000 g
Pepsin Pack	175748.0922	3 x 175208.0011
		1 x 133378.1214

IP-036EN

AppliChem GmbH
 Ottoweg 4
 DE-64291 Darmstadt
 Germany
 Phone +49 6151 9357 0
 Fax +49 6151 9357 11
info.de@itwreagents.com

Nova Chimica Srl
 Via G. Galilei, 47
 I-20092 Cinisello Balsamo
 (Milano) Italy
 Phone +39 02 66045392
 Fax +39 02 66045394
info.it@itwreagents.com

PanReac Química SLU
 C/ Garraf 2, Polígono Pla de la
 Bruguera
 E-08211 Castellar del Vallès
 (Barcelona) Spain
 Phone +34 937 489 400
 Fax +34 937 489 401
info.es@itwreagents.com

www.itwreagents.com