



Okatest

- Do you need to assure that your product will not cause diarrheic poisoning syndrome (DSP)?
- Do you need to demonstrate that your molluscs comply with the legal requirements?
- Would you like to know when is the best time to harvest or sell your molluscs?

Okatest quantifies the okadaic acid toxins group, together with the associated toxicity, and without the need for high investments in equipment or highly qualified personnel.

Okatest can help you to choose the best area and time to harvest. Performing shelf-control with Okatest before harvesting or as end-product testing you can assure molluscs are fit for consumption and avoid unnecessary process of contaminated products.

EASY:

- Enzyme test (PP2A inhibition) in two simple steps.
- Without highly qualified staff.
- Assay of approximately 1h.

QUANTITATIVE:

- Working range from 63 to 352 µg/Kg. Adjusted to the legal limit of 160 µg/Kg.

FLEXIBLE:

- Analyses of up to 43 samples in a single assay 96 test kit to be divided into 4 or 6 different tests.

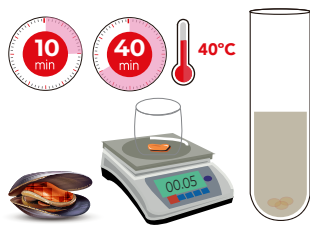
MATRIX:



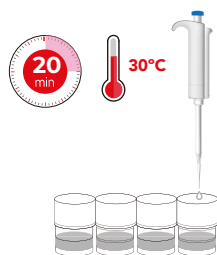
BIVALVE MOLLUSCS



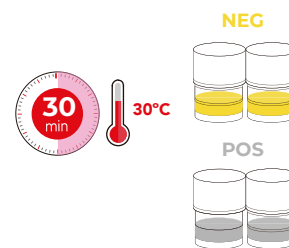
ASSAY PROCEDURE:



1. Sample extraction:
5gr + 25ml methanol
Centrifugation 10 min.
76°C 40min.



2. Incubation I:
Samples | Patterns + PP2A
30°C 20 min.



3. Incubation II & Results:
Substrate 30°C 30 min.
Photometric reading at 405 nm

TECHNICAL DATA:

PARAMETER	RESULT	
Limit of Detection (LOD) n=8	44 µg AO equivalents/kg (White+3SD) (mussel)	
Limit of Quantification (LOQ) n=8	56 µg AO equivalents/kg (White+10SD) (mussel)	
Calibration Curve	0.5nM-2.8nM	
Range of work	from 63 to 352 µg AO equivalents/kg	
	Concentration added (µg equiv. AO/kg)	RSDr (n=8)
Accuracy: Repeatability (Mussel)	124	3.9%
	276	1.4%
	Concentration added (µg equiv. AO/kg)	RSDr (n=3)
Intra-laboratory reproducibility (Mussel)	88	7.0%
	122	7.8%
	282	2.4%
	Concentration added (µg equiv. AO/kg)	Recovery (RSDR)
Accuracy: Repeatability, % n=5 Doped with AO Matrix: Mussel	80	101% (14.6%)
	160	90% (8.9%)
	240	78% (5.4%)
Doped with AO Matrix: Scallop	80	114% (9.9%)
	160	98% (8.4%)
	240	106% (8.7%)
Doped with DTX1 Matrix: Scallop	80	102% (14.5%)
	160	79% (11.7%)
	240	88% (16.9%)
Doped with DTX2 Matrix: Mussel	80	93% (2.3%)
	Concentration added (µg equiv. AO/kg)	(RSDR)
Estimated reproducibility between laboratories	88	7.0%

(http://aesan.mssi.gob.es/en/CRLMB/web/otros_procedimientos/other_crlmb_standard_operating_procedures.shtml)

VALIDATIONS:

Internal validation (Smienk et al. Toxins 2012).

Interlaboratory validation (Smienk et al. J. AOAC Int, 2013).

OKATEST complies with the requirements of Regulations 853/2004 and 2074/2005.