



CLOSTRIDIUM PERFRINGENS ELISA KIT

BIO K 269/1 - BIO K 269/2

Enterotoxaemia is a fatal enteric disease that affects all species of domestic animals and is attributable to a toxigenic type of *Clostridium perfringens*. The latter is an anaerobic, strongly gram-positive bacterium that has the ability to form heat-resistant endospores. This bacterium is grouped into five types (types A, B, C, D and E) according to the four major lethal toxins, alpha, beta, epsilon, and iota (α , β , ϵ , ι) produced. *C. perfringens* has been shown to be a cause of human diseases such as gas gangrene (clostridial myonecrosis), food poisoning, necrotising enterocolitis of infants, and enteritis necroticans (pigbel). It is also the causative agent of lamb dysentery, ovine enterotoxaemia (struck) and pulpy kidney disease of sheep, and other enterotoxaemic diseases of lambs and calves. Large amounts of toxin in addition to large numbers of *C. perfringens* cells can usually be detected in the intestinal fluid of the diseased or dead animals. As *C. perfringens* is a natural commensal of human and animal intestines, identifying of the bacterium is not enough. Toxinotyping and quantifying of the isolated strains are essential.

The Bio-X *Clostridium perfringens* ELISA Kit reveal the multiplication of the bacterium.

The kit works with culture supernatants as well as biological probes such as liquid intestinal contents and pericardial- or peritoneal fluid.

EIA Procedure

- 1- Microplate coated with monoclonal antibody
- 2- Add samples and positive control.
Incubate 1 hour at 21°C +/- 3°C
Wash
- 3- Add conjugate.
Incubate 1 hour at 21°C +/- 3°C .
Wash
- 4- Add monocomponent TMB
Wait 10 minutes.
Add stop solution.
Read at 450 nm

Reliable Results

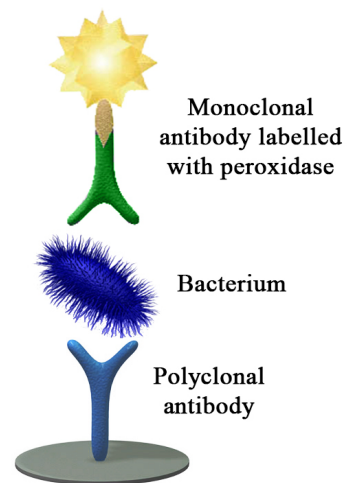
The use of monoclonal antibody as conjugate and in capture ensure excellent specificity and very reliable results.

Ease-of-Use

Minimal hands-on-time
Room temperature incubation
Results available in 140 minutes.
All reagents are ready to use.

Flexibility

Results can be read visually or spectrophotometrically.





Example of results

ATCC 13124 <i>Clostridium perfringens</i> Detection with BIO K 269 test kit					
First assay			Second assay		
Nbr of bacteria	O.D. ELISA		Nbr of bacteria	O.D. ELISA	
340 10 ⁶ bact/ml	1.638	Pos	200 10 ⁶ bact/ml	2.085	Pos
34 10 ⁶ bact/ml	0.656	Pos	20 10 ⁶ bact/ml	0.751	Pos
3.4 10 ⁶ bact/ml	0.068	Neg	2 10 ⁶ bact/ml	0.097	Neg

Composition of the kit

BIO-X: *CLOSTRIDIUM PERFRINGENS* ELISA KIT : BIO K 269

	BIO K 269/1	BIO K 269/2
Microplates	1 (48 tests)	2 (96 tests)
Washing solution	1 X 100 ml (20x)	1 X 100 ml (20x)
Dilution buffer	1 X 50 ml (5x)	1 X 50 ml (5x)
Conjugate	1 X 12 ml	1 X 25 ml
Control antigen	1 X 2 ml	1 X 4 ml
TMB monocomponent	1 X 12 ml	1 X 25 ml
Stop solution	1 X 6 ml	1 X 15 ml

Stability : One year between +2°C and +8°C

