Condasene

Condagene® Quick Extraction Kit Verification Report (CAT. 6501)

Condagene

Scope

This reagent is intended for the extraction/purification of DNA in samples with low or moderate levels of PCR inhibitors.

Genomic DNA can be obtained rapidly with this reagent, without the need for enzymatic phenol/chloroform digestions or separation columns.

One of the main matrices of interest is enrichment broths (BPW) in food microbiology tests, in which the matrix effect and the flora present can affect the robustness of the method.

Tests

Samples: Catering food, prepared with heat treatment and without heat treatment.

Primary enrichment: BPW + Novobiocin, 22 h at 41,5°C.

Spiked sample: Salmonella enterica ATCC 13076, <100 CFU/25 gr.

PCR Kit: Condagene® Salmonella spp (CAT. 6515).

For each primary enrichment, three independent aliquots were separated. DNA purification was performed with a kit from another manufacturer as well the Condagene® Quick Extraction Kit (CAT. 6501). In both cases with an equivalent protocol.

DEE	ТҮРЕ	REPLICATE -	SALMONELLA SPP (CT)					
REF.			Brand X	Mean	SD	CAT. 6501	Mean	SD
1	Control	Α	33,31			29,35		
		В	32,59	32,59	0,58	28,47	29,06	0,42
		С	31,88			29,36		
	Soup with noodles	Α	28,42			25,70		
2		В	28,99	28,77	0,25	26,06	26,02	0,24
		С	28,90			26,29		
	Salad	Α	23,57			23,87		
3		В	23,40	23,49	0,07	23,76	23,82	0,04
		С	23,51			23,82		
	Vegetable cream	Α	24,56			24,97		
4		В	24,65	24,60	0,04	25,20	25,09	0,09
		С	24,59			25,10		
	Beef stew	Α	23,89			24,06		
5		В	24,34	23,95	0,30	23,91	24,01	0,07
		С	23,61			24,07		
	Vegetable cream	Α	35,30			29,44		
6		В	37,16	35,98	0,84	28,94	29,04	0,30
		С	35,47			28,73		
	Beef stew	Α	35,62			28,22		
7		В	33,76	34,67	0,76	28,02	28,00	0,19
		С	34,62			27,76		



REF.	TYPE	REPLICATE -	SALMONELLA SPP (CT)					
			Brand X	Mean	SD	CAT. 6501	Mean	SD
8	Salad	Α	36,37			28,55		
		В	37,40	36,74	0,47	28,83	28,58	0,19
		С	36,44			28,36		
9	Vegetable cream	Α	24,76			30,24		
		В	25,91	25,35	0,47	32,00	31,42	0,83
		С	25,38			32,01		
	Beef stew	Α	24,08			24,05		
10		В	24,23	24,11	0,08	23,89	23,97	0,07
		С	24,03			23,97		
	Salad	Α	23,83			23,71		
11		В	23,54	23,55	0,23	23,85	23,86	0,13
		С	23,27			24,02		
	Beef stew	Α	34,62			26,01		
12		В	35,24	34,85	0,28	26,13	26,20	0,19
		С	34,69			26,46		
13	Salad	Α	36,12			27,74		
		В	35,6	35,61	0,41	27,81	27,42	0,50
		С	35,11			26,71		

For each pair of average results, the best one is marked in red.

Conclusions

With real samples, the Condagene® Quick Extraction Kit has obtained positive results on all of them with values consistent with the positive process control.

The Condagene® Quick Extraction Kit generally obtains performance equivalent to or greater than a product with similar characteristics from another manufacturer. The standard deviations between the different replicates show that the kit allows to obtain homogeneous results.

The Condagene® Quick Extraction Kit kit is considered suitable for obtaining Gram-negative DNA in primary enrichment cultures based on peptone broths.



 $export@condalab.com \hspace{0.2cm} | \hspace{0.2cm} www.condalab.com \\$

If you need more information about qPCR products and techniques for pathogen detection, do not hesitate to contact us.