

COMPARATIVE STUDY OF DUO ROTA/ADENOVIRUS CASSETTE TESTS REFERENCE 302971 (ROTADENO-SCREEN® CASSETTE TEST) AND REFERENCE 30041

I. Principle

This study was performed to compare the results obtained using the two DUO Rota/Adenovirus cassette references, one of them (ref. 302971) corresponding to the ROTADENO-Screen® cassette.

II. Method

This study was performed on September 22nd, 2020, using material indicated in Table 1.

Components	Lots
DUO Rota/Adenovirus Ref. 30041	200619-020
DUO Rota/Adenovirus Ref. 302971 (ROTADENO-Screen®)	200211-014 200709-021
Extraction solution	25108-02
Adenovirus antigen Ref. R02721	1A02319
Rotavirus antigen Réf. 7844	M18878011

Table 1 : Components

Dilution range was prepared starting an adenovirus antigen as indicated in Table 2.

Antigen volume	Extraction solution volume	Dilution
50 µL of adenovirus antigen	450 µL	1/10
10 µL of 1/10 dilution	990 µL	1/1000
500 µL of 1/1000 dilution	500 µL	1/2000
500 µL of 1/2000 dilution	500 µL	1/4000
500 µL of 1/4000 dilution	500 µL	1/8000
250 µL of 1/8000 dilution	750 µL	1/32000

Table 2 : Adenovirus antigen dilutions

Dilution range was prepared starting a rotavirus antigen as indicated in Table 3.

Antigen volume	Extraction solution volume	Dilution
40 µL of rotavirus antigen	960 µL	1/25
30 µL of 1/25 dilution	930 µL	1/800
450 µL of 1/800 dilution	450 µL	1/1600
450 µL of 1/1600 dilution	450 µL	1/3200
450 µL of 1/3200 dilution	450 µL	1/6400
450 µL of 1/6400 dilution	450 µL	1/12800

Table 3 : Rotavirus antigen dilutions

Dilutions are assayed as the experimental conditions reported in Table 4.

	Protocol
Sample	150 µL (DUO Ref. 302971) 200 µL (DUO Ref. 30041)
Reading time	10 minutes

Table 4: Protocol assay

III. Results

The results are summarized in Table 5. The results interpretation is indicated in the brackets.

Sample		Results at 10 minutes	
		DUO tests Ref. 30041	DUO tests Ref. 302971
Negative		- (-)	- (-)
Rotavirus	1/2800	- (-)	- (-)
	1/6400	+/- (+)	+/- (+)
	1/3200	+ (+)	+ (+)
	1/1600	2+ (+)	2+ (+)
	1/800	3+ (+)	3+ (+)
Adenovirus	1/32000	- (-)	- (-)
	1/8000	- (-)	- (-)
	1/4000	+/- (+)	+ (+)
	1/2000	+ (+)	2+ (+)
	1/1000	3+ (+)	3+ (+)

Table 5: Results

IV. Conclusion

The results show that DUO Rota/Adenovirus cassette tests Ref. 302971 (corresponding to the ROTADENO-Screen® cassette test) and Ref. 30041 have the same performances.

Raphaël DONATI
Technical manager