RAPYDTEST[®] FOR THE DETECTION OF ROTAVIRUS IN FAECES

Intended Use

The Rotavirus Ag Rapydtest[®] is a lateral flow immunoassay for the qualitative detection of rotavirus antigens in faecal specimens.

This device is intended to be used as a screening test and as an aid in the diagnosis of infection with rotavirus.

Rotavirus Ag

Performance Characteristics

Serotype Detection

The Rotavirus Ag Rapydtest[®] detects Group A rotavirus.

Cross-Reactivity

The cross-reactivity of the Rotavirus Ag Rapydtest[®] was assessed by testing faecal specimens collected from patients with other gastro-intestinal infectious diseases. No cross-reactivity was observed.

Clinical Performance

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Clinical Performance of rotavirus specimens: 107 faecal samples collected from subjects with symptomatic diarrhoea and non-diarrhoea symptoms were tested with the Rotavirus Ag Rapydtest[®] and with a reference rapid test. Comparison for all subjects is shown in the table.

Rotavirus

Relative Sensitivity: 100% Relative Specificity: 97.2% Overall Agreement: 98.1%



	Rotavirus Ag Rapydtest [®]		
REFERENCE TEST	POSITIVE	NEGATIVE	TOTAL
POSITIVE	36	0	36
NEGATIVE	2	69	71
TOTAL	38	69	107



VIROLOGY SINGLE USE IN VITRO DIAGNOSTIC DEVICE



Rotavirus Ag

Reagents and Materials Provided

- 1. Individually sealed foil pouches containing:
 - a. One cassette test device.
 - b. One desiccant.
- 2. Stool collection devices, each containing 2ml of extraction buffer.
- 3. Plastic droppers for transferring watery stool.
- 4. One package insert (instruction for use).

Specimen Collection and Handling

Consider any materials of human origin as infectious and handle them using standard biosafety procedures.



Do not read results after 20 minutes. To avoid confusion, discard the test device after interpreting the result.

Interpretation of Assay Result

1. Negative Result: If only the C line is developed, the test indicates that the level of rotavirus Ag in the specimen is undetectable. The result is negative.



2. Positive Result:

If both the C line and the T line are developed, the test indicates that the specimen contains rotavirus Ag. The result is positive.



Invalid: 3.

If no C line is developed, the assay is invalid regardless of colour development on the T line as indicated below. Repeat the assay with a new device.



References

- 1. Kosek M, Bern C, and Guerrant RL. The global burden of diarrhea disease, as estimated from studies published between 1992 and 2000. Bull WHO. (2003) 81:197-204.
- 2. O'Ryan, M, Prado V, and Pickering LK, A millennium update on pediatric diarrheal illness in the developing world. Semin Pediatr Infect Dis (2005) 16:125-136
- Parashar U, Gibson CJ, Bresee JS, et al. Rotavirus and severe childhood diarrhea. Emerg Infect Dis (2006) 12:304-306.
 Parashar UD, Bresee JS, Gentsch JR, et al., Rotavirus. Emerg Infect Dis (1998) 4(4):561-570.
- Standi Go, Breiris Medical Microbiology, Sth ed. McGraw Hill Medical, 2010.
 Styan, KJ and Ray, CG. Sherris Medical Microbiology, Sth ed. McGraw Hill Medical, 2010.
 Gurwith, M., Wenman, W., Hinde, D., et al. A prospective study of rotavirus infection in infants and young children. J Infect Dis (1981) 144:218-224.
 Velázquez, FR, Matson, DO, Calva, JJ, et al. Rotavirus infections in infants as protection against subsequent infections. N Engl J Med (1996) 335:1022-1028.

- Angel, J. Franco, MA, and Greenber, HB. Rotavirus immune responses and correlates of protection. Curr Opin Virol. (2012) 4:419-425.
 Kapikian, AZ, Hoshino, Y, Chanock, RM, Rotaviruses. In: Knipe, DM, Howley, PM, Griffin, DE, et al, Eds. Field's Virology. 4th edition. Philadelphia, Pennsylvania: Lippincott, William and Wilkens Press, 2001. p. 1787-1793.
 Kirkwood CD. Genetic and antigenic diversity of human rotaviruses: potential impact on vaccination programs. J Infect Dis (2010) 202 Suppl:S43-8.
- Estes, MK, and Kapikian AZ. Rotaviruses. In: Knipe, DM, Howley, PM, Eds. Field's Virology Philadelphia, Pennsylvania: Lippincott, William and Wilkens Press, 2007.
 Christensen, ML. Human viral gastroenteritis. Clin Microbiol Rev (1989) 2:51-89.
- 13. Dennehy, PH, Gauntlett, DR and Spangenberger, SE. Choice of reference assay for the detection of rotavirus in fecal specimens: electron Microscopy versus enzyme immunoassay. J Clin Microbiol (1990) 6:1280-1283 14. Lipson, SM, and Zelinsky, KA. Comparison of four latex agglutination (LA) and three enzymelinked immunosorbant assays (ELISA) for the detection of rotavirus in fecal specimens.. Am. J. Clin. Path. (1989) 92: 637-643.

PRODUCT	PACK SIZE	CODE
Rotavirus Ag Rapydtest®	25	1641

Products can be ordered direct from Apacor or from an appointed distributor

Visit our website for all the latest information www.apacor.com or email on: sales@apacor.com



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