

zshoja@razi.tums.ac.ir :

( )  
WHO (Polio free)

Acute Flaccid Paralysis (AFP)

( ) AFP ( ) AFP

AFP  
WHO

AFP

L20 Hep2 RD

(Reverse Transcription-Polymerase Chain Reaction)

RD,L20,Hep2

AFP

(Neutralization Test)

( )

Pan-Ev

RT-PCR

RD

RD

RT-PCR

%

RT-PCR

AFP

RT-PCR

%

AFP

( )

( )

:

-

,

,

,

:

Pallenseh )

(et al. 2001; Schweighardt et al. 2001

CNS

(Rotbart et al. 2000)

(Retrograde axonal flow)

CNS

(CNS)

% /

(Pallenseh et al. 2001)

(Pallenseh et al. 2001)

Pallenseh et al. 2001; Schweighardt et al. )

(2001

Pallenseh et al. )

(2001

(Dowdle et al. 2003)

(Minor viremia)

)

CNS . (

CNS

AFP

(Major viremia )

PBS

AFP

RD,L20,Hep2

(

(invert)

(CPE)

(Gold Standard )

( )

( A

Rotbart et al. 2000; Santos)

: NT

(et al. 2003

TCID50

CPE

RT-PCR

% %

NT

RNA.

RT-PCR

RNA

(Rotbart et al. 2000; Santos et al. 2002)

RT-PCR

AFP

IgG

AFP

(RD) IgG

Pan-En RT-PCR

Pan- : RT-PCR

Polio (Extraction) AFP

Pan-En

(% / ) RT-PCR ( )

RT-PCR

( ) ( % )

( ) Pan-Polio

AFP

(WHO 2004) (RD,L20,Hep2)

AFP ,AFP

AFP ( Hep2,RD,L20)

AFP RD

( ) Hep2 L20

AFP RD

L20 Hep2

AFP ( )

) AFP (

Hep2, L20, RD : RT-PCR

(% / ) (Extraction)

RD Pan-En RT-PCR

( % )

(Reynolds et al. 2001)

L20 Hep2 ,RD

AFP

L20

%

AFP

(Santos et al. 2002)

RT-PCR

AFP

RT-PCR

AFP

A

Nadkarni )

(RD)

(et al. 2003)

RD

L20

(% / )

RT-PCR

RT-

(% / )

L20 RD

Hep2

(% )

PCR

RT-PCR

Hep2

RT-PCR

RT-PCR

%

Rotbart et al.1997; Romero )

(1999; Santos et al. 2002

RD

(WHO)

RT-PCR

L20

% /

Hep2 RD

L20 RD

Gold

RT-PCR

Standard

:

(Landry et al. 2003; Kessler et al. 1997)

Santos ) A  
et al. 2002; Ishiko et al. 2002; landry et al.  
(Inhibitors) (2003

, NT

RT-PCR

PCR

( )

Pan-Ev

Freeze-thaw

Landry et al. )

(2003; Kessler et al. 1997

AFP

RT-

RT-

%

PCR

Pan-Ev

PCR

AFP

Pan-polio

( )

RT-PCR

Chaves et al. 2001; Solomon et al. 2003; )

(Grimwood et al. 2003

RT-PCR

AFP

( )

AFP

Hep2 RD

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**RT-PCR**

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Pan-Enterovirus (PanEV)	5'-ACACGGACACCCAAAGTAGTCGGTTC-3' 5'- TCCGGCCCCTGAATGCGGCTAATCC-3'	114 base pairs
Pan-Poliovirus (Pan PV)	5'-TTIAIIGCRTGICCRTRTT-3' 5'-CITAITCIMGITTYGAYATG-3'	79 base pairs

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Chomczynski 1987; WHO Manual

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Hep2   L20   RD

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Hep2   L20   RD

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(            ) AFP

**RT-PCR**

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RT-PCR

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