

A novel rat CVB1-VP1 monoclonal antibody 3A6 detects a broad range of enteroviruses

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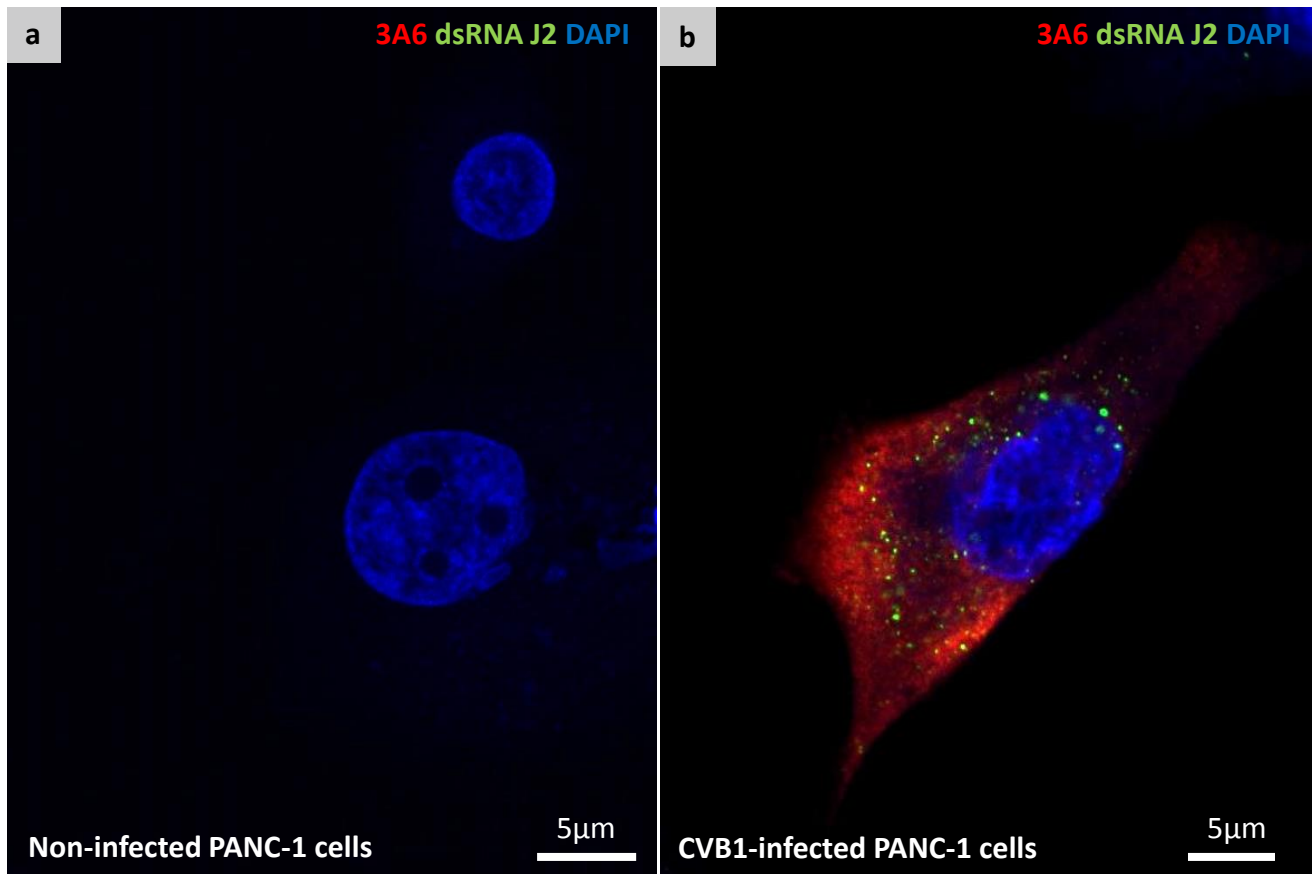


Figure S1. 3A6 localizes to same cells as dsRNA (J2). A merged confocal image of PFA-fixed non-infected control cells a) and CVB1-infected PANC-1 cells b) double stained with 3A6 (red) and dsRNA antibody J2 (green). Cell nuclei were stained with DAPI (blue).

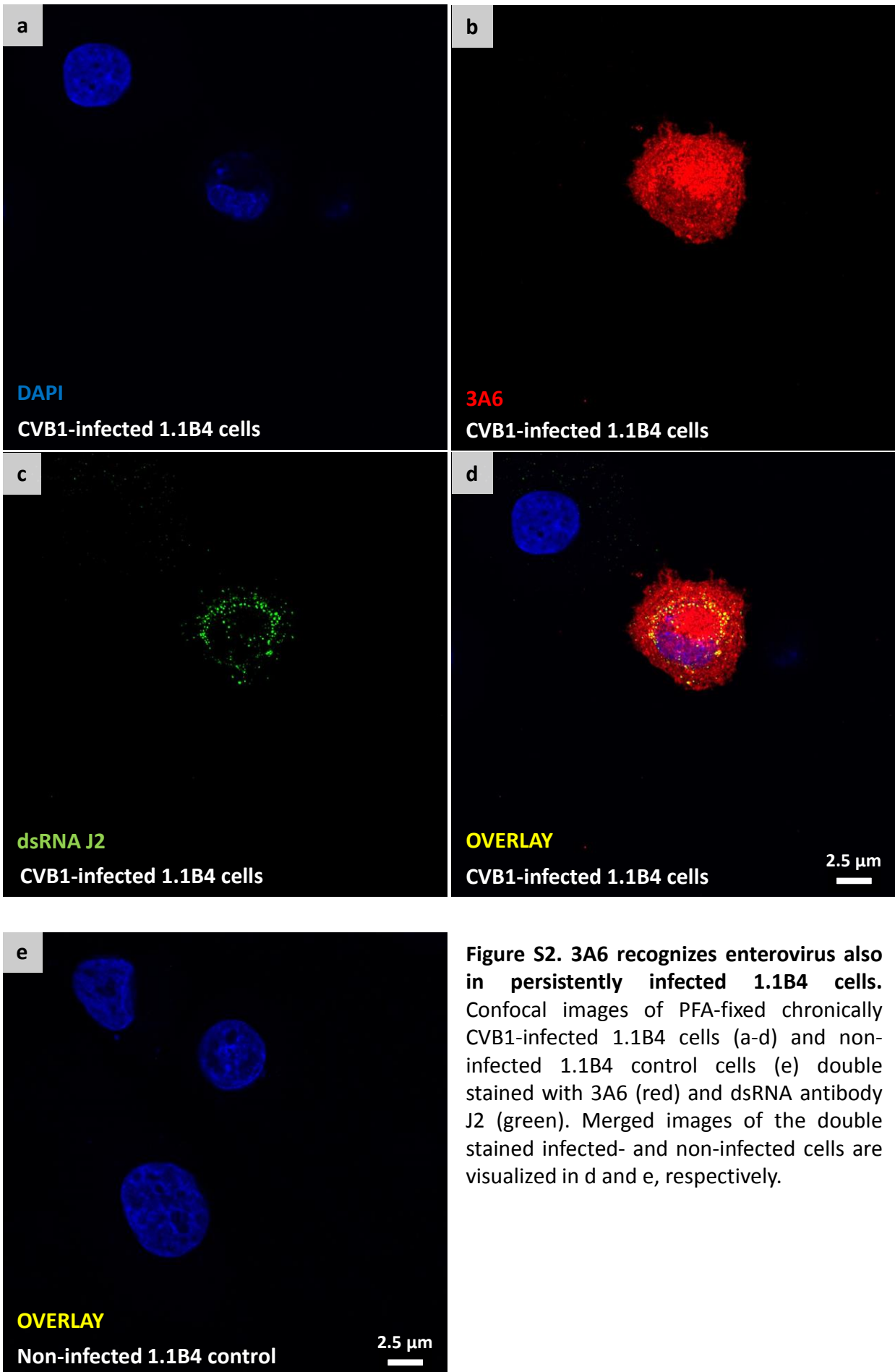


Figure S2. 3A6 recognizes enterovirus also in persistently infected 1.1B4 cells. Confocal images of PFA-fixed chronically CVB1-infected 1.1B4 cells (a-d) and non-infected 1.1B4 control cells (e) double stained with 3A6 (red) and dsRNA antibody J2 (green). Merged images of the double stained infected- and non-infected cells are visualized in d and e, respectively.

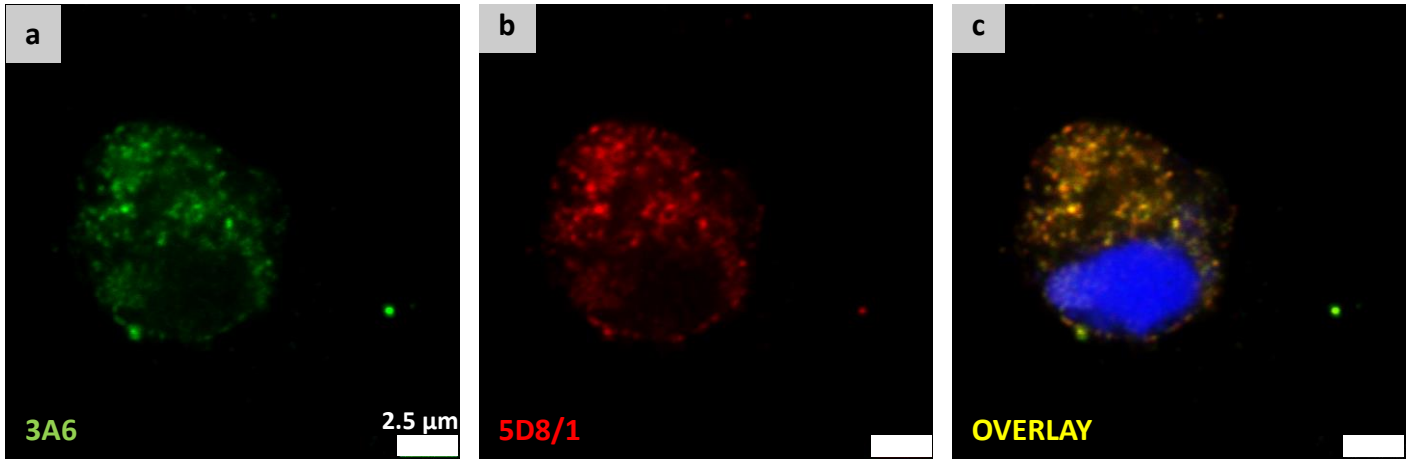


Figure S3. Double staining of infected Vero cells with 3A6 and 5D8/1. High magnification image of a CVB1-infected Vero cells stained with a) 3A6, b) 5D8/1 and c) merged image, demonstrates colocalization of the two antibodies.

CLUSTAL O(1.2.4) multiple sequence alignment

CAV2-Fleetwood	--ANTQVSQHSIETGRVPALQAAETGATSNASDENLIE	EV-A
CAV4-High-point-AY421762.1	--ANTAPSSHSLNTGLVPALQAAETGASSTATDGNLIE	EV-C
PV3	ALPNTTE-ASGPTHSKETIPALTAVETGATNPLVPSDTVQ	EV-C
Cav9-Griggs-D00627.1	--ADTM-RTGPSNSASVPALTAVETGHTSQVTPSDTM-	EV-B
Echovirus6-FIN09-NPA-	--ADTM-PSGPSNSESIPALTAETGHTSQVVPSDTI-	
CVB1-pMP1.23-AY186746.1	--ADTV-SSRPTNSESIPALTAETGHTSQVVPSDTM-	
CVB3	--ADTV-GTGPTNSEAIPALTAETGHTSQVVPGDTM-	
CVB5-Faulkner-AF114383.1	--ADTI-GSGPVNSESIPALTAETGHTSQVVPADTM-	
Echo3-Morrissey	--ADTM-PTGPRNTE SVPALTAVETGHTSQVVPGDTM-	
CVB2-Ohio-1-AF085363.1	--ADTI-GSGPSNSEAIPVLTAVETGHTSQVTPSDTM-	
CVB4-E2-AF311939.1	--ADTI-ARGPSNSEQIPALTAVETGHTSQVDPSDTM-	
CVB6-Scmitt-AF105342.1	--ADTM-PSGPTNSEAVPALTAVETGHTSQVVPSDNM-	
Echo9-Hill-X84981.1	--ADTI-RSGPSNSEAVPALTAETGHTSQVVPSDTM-	
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Figure S4. Sequence alignment around the presumed epitope area of 5D8/1(Purple) of selected enteroviruses in the N-terminal of VP1 proteins. Highlighted in red the most obvious difference between PV3 and EVB-viruses at position (40-41) in relation to CVB1 VP1 aminoacid sequence. 3A6 detected PV3 in fluorescent assays, but not in WB, whereas EV-A viruses gave no signal in either.