CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	Structure and assembly of TP901-1 virion unveiled by mutagenesis
Authors	Stockdale, Stephen R.;Collins, Barry;Spinelli, Silvia;Douillard, François P.;Mahony, Jennifer;Cambillau, Christian;van Sinderen, Douwe
Publication date	2015-01-01
Original Citation	Stockdale SR, Collins B, Spinelli S, Douillard FP, Mahony J, Cambillau C, et al. (2015) Structure and Assembly of TP901-1 Virion Unveiled by Mutagenesis. PLoS ONE 10(7): e0131676. doi:10.1371/journal.pone.0131676
Type of publication	Article (peer-reviewed)
Link to publisher's version	10.1371/journal.pone.0131676
Rights	© 2015 Stockdale et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited - http://creativecommons.org/licenses/by/4.0/
Download date	2026-11-15 04:42:15
Item downloaded from	https://hdl.handle.net/10468/2303

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

```
MCP1-TP901-1      MKTPDYWKKREKAWQEQQIKDDTKRMKQIMDKLFEAQEAIQKEINANWQNFANGQGISIS
MCP1-Tuc2009      MNSSDYWRKREKAWQEQQIKDDTKRMKQIMDKLFEAQEAIQKEINANWQNFANGQGISIS
gp7-SPP1          MPEPQNQEELDKYLDN-IITQAEKRLDKVFASRLKEIKAMINKLFEKYS--KNGE-----
                  *  .:  .: :*  ::  *.:  **:.::: . ::  :*: :::  ::.   **:

MCP1-TP901-1      EAMKRADKMDVKAFANKAKKYVQEKDFSNQANQVLKLYNLTMRVNRLELLKANIGLELIS
MCP1-Tuc2009      EAMKRADKMDVKAFENKAKKYVKEKDFSHQANQVLKLYNLTMRVNRLELLKANIGLELIS
gp7-SPP1          --LTYADVVKYNRLEKEMD--VIKQNISADYKTVLKMLNELLETQYVDNYLR--SAYIYE
                    :. ** :. : : :: .  * ::::* : : ***: *  :..: ::      .  : .

MCP1-TP901-1      VFDDLDKYFSNNLTSAALTEFERQAGILGLSVPKEGYNSLVESVLNGSYKVEGFASFSDK
MCP1-Tuc2009      VFDDLDKYFSKNLTGAALTEFERQAGILGLSVPKKGYNSLVESVLNGSYKVEGFASFSDK
gp7-SPP1          MYTGRNLGFS--VPSADVVQRAVENPIPLLTLPKVLERQRVELINNIAMAIAQGLMAGEG
                  :: . :  **  :..* :.:   :  *  *::**   .. ** : * :  :      .:

MCP1-TP901-1      LWQYQFELKADIEKLLIRSVTGGINPKTLAPQLKRLMTEKGKLNATYNAQRLLVSETTRI
MCP1-Tuc2009      IWQYQFELKADIEKLLIRSVTGGINLKALAPQLKRLMTEKGKLNATYNAQRLLVSETTRI
gp7-SPP1          YSQVAQRVHKRMQLSLAKARLTARTEGHRVQVAGRMASAEQAAKKVNMQKMWSAALDTRT
                    *   .::  ::  * ::   . .    .    *: : :   : .   :   .:  **

MCP1-TP901-1      QTAIQEESYKKADIESYEYIAEPSACPICGALNGKIFKLKDMSPGINAPNMHPFCRCSTA
MCP1-Tuc2009      QTAIQEESYKKADIESYEYIAEPSACPICGALNGKIFKLKDMSPGINAPNMHPFCRCSTA
gp7-SPP1          RAGHRKLDGKIINMD-------ENFKSIYGGVGKAPGHMHMAKDDCNCRCALIYVIDGEI
                  ::. :: . *  :::        .  .* *.:.    :::  . . *.     :   .

MCP1-TP901-1      PHVDDKAFWDDRLKEQDKKNSGKNIPVSLKGLNDDYLNEKREESRLKAGRVNAKKYDAQS
MCP1-Tuc2009      PHVDDKGFWDDLLD----------------------------------------------
gp7-SPP1          PSVRRARLSDGSTR----------------------------------------------
                  * *    : *.

MCP1-TP901-1      ESFANVTNEASMRMRISDIGFRRAIESGNLKSSHELGDDFDKGRIRIEKTLFNLPENIKR
MCP1-Tuc2009      ----------------------RKVISQDEYKQA---------------------------
gp7-SPP1          ----------------------VIKYIPYTEWEKQ---------------------------
                                       : *   : :.

MCP1-TP901-1      SEMPKYGYLSDSDDLFEKKTKHSVLGYGNIIIELDDSVRKRTTYTVNDSLVNKRGLITSA
MCP1-Tuc2009      ---------------FDDRTED-----------------------------------------
gp7-SPP1          -----------------KKAS-----------------------------------------
                                 .::.

MCP1-TP901-1      TPVGTKPTYNGIKEKAIGEINSISEFLNSNKKTNRYIEAQYHGDLTFKNDVKRIIVPDKS
MCP1-Tuc2009      -------------DKAIEELR--------NKRKG-------------------------
gp7-SPP1          ------------------------------------------------------------

MCP1-TP901-1      YLDKLSKEFEQLKNMGIEVLVAPK
MCP1-Tuc2009      -------------------------
gp7-SPP1          -------------------------
```