

Table 5. Envelope proteins

ORF	IDENTITY	LIBRARY SCREEN	SDS- PAGE -MALDI ‡ - Sequence information obtained using MS/MS	MUDPIT MS/MS	WESTERN BLOT	REF
16	BV/ODV-E26					1
23	f-protein	1			X	
46	ODV-E66	2	<p>MSIVLIIVIVVIFLICFLYLSNSN NKNDANKNNAFIDLNPLPLN ATTATTTTAVATTTTNNNSI VAFRQNNIQELQNFERWFKN NLSYSFSQKAEKVVPNPNRW NDNTVFDNLSPWTSVPDFGT VCHTLIGYCVRYNNTSDTLY QNPELAYNLINGLRIICSKLPD PPPHQQAPWGPVADWYHFTI TMEVFMNITIVLNETQHYDE AASLTRYWLGLYLPTAVNSM GWHRTAGNSMRMGVPYTY QILRGYSLAQIRQEQGIQELN TIAFPYVTQGNLHVDSIYID HIDVRAYGYLINSYFTFAYYT YYFGDEVINTVGLTRAIENVG SPEGVVPGVMSRNGTLYSN VIGNFITYPLAVHSADYSKVL TKLSKTYGSVVGVNRLAY YESDPTNNIQAPLWTMARRI WNRGRRIYNANTVSFESGII LQSLNGIMRIPSGTTSTQSERP TIGQTAIKTDTAGAILVYAK FAEMNNLQFKSCTLFYDHGM FQLYYNIGVEPNSLNNTNGRV IVLSRDTSVNTNDSLFEAQRIN NNSSEGTTFNGVVCHRVPIT NINVPSLTVRSPNSSVELVEQII SFQTMYTATASACYKLNVEG HSDSLRAFRVNSDENIYVNVG NGVKALFNYPWVMVKENK VSFMSANEDTIPFSVIMNSFT SIGEPALQYSPSNCFVYGNF KLNNSFDLQFIFEIV ‡NITIVLNETQHYDEAASLTK; QNNIQELQNFER; IPSGTTSTQSERPTIGQTAIK</p>	<p>MSIVLIIVIVVIFLICFLYLSNSN KNDANKNNAFIDLNPLPLNATT ATTTTAVATTTTNNNSIVAFRQ NNIQELQNFERWFKNNLSYSFSQ KAEKVVPNPNRWNDNTVFDNL SPWTSVPDFGTVCHTLIGYCVR YNNTSDTLYQNPELAYNLINGL RIICSKLPDPPPHQQAPWGPVAD WYHFTITMPEVFMNITIVLNETQ HYDEAASLTRYWLGLYLPTAVN SMGWHRTAGNSMRMGVPYTY QILRGYSLAQIRQEQGIQELNTI AFPYVTQGNLHVDSIYIDHIDV RAYGYLINSYFTFAYTYFYFGD EVINTVGLTRAIENVGSPGVV PGVMSRNGTLYSNVIGNFITYPL AVHSADYSKVLTKLSKTYGYSV VGVNRLAYYESDPTNNIQAPL WTMARRIWNRRGRIYNANTV SFESGIIQLSLNGIMRIPSGTTSTQ SFRPTIGQTAIKTDTAGAILVY AKFAEMNNLQFKSCTLFYDHG MFQLYYNIGVEPNSLNNTNGRV IVLSRDTSVNTNDSLFEAQRIN NNSSEGTTFNGVVCHRVPITNIN VPSLTVRSPNSSVELVEQIISFQT MYTATASACYKLNVEGHSDSLR AFRVNSDENIYVNVGNGVKALF NYPWVMVKENKVSFMSANED TTIPFSVIMNSFTSIGEPALQYSPS NCFVYGNFGLNNSFDLQFIFE IV</p>		2

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			sequence obtained by MS/MS			
*80	gp41	6	<p>MTDERG<u>NFYNTPPPLRYPSN</u> PATAIFTSAQTYNAPGYVPPA TVPTTVATR<u>DNRM</u>DYTSRSN <u>STNSVAIAPY</u>NKSKEPTLDAG <u>ESIWY</u>NKCVDFVQKIIRYYRC NDMSELSPLMILFINTIRDMCI DTNPISVNVVK<u>RFESEETMIR</u> HLIRLQKELGQSNAEESLSSD SNIFQPSFVLSLPAYAQ<u>KEY</u> <u>NGGADMLGKDALAEAAKQL</u> SLAVQYMVAEAVTCNIPIPL FNQQLANNYMTLLLK<u>HATLP</u> <u>PNIQSAVESRR</u>FPHINMINDLI NAVIDDLFAGGGDYHYVLN EK<u>NRARVMSL</u>KENVAFLAPL <u>SASANIENYMAELATR</u>AGKQ PSM<u>FQ</u>NATFLTSAANAVNSPA <u>AHLTKSACQESLTELAFQNET</u> <u>LRREFIQINYNKDANAIIAAA</u> <u>APNATRPN</u>TKGRTA ‡IFNYMAELATR; FQATFLTSAANAVNSPAH LTK sequence obtained by MS/MS</p>	<p>MTDERG<u>NFYNTPPPLRYPSN</u> ATAIFTSAQTYNAPGYVPPATVP TTVATRDNRM<u>DYTSR</u>SNSTNSV <u>AIAPY</u>NKSKEPTLDAGESIWYK CVDFVQKIIRYYRC<u>NDMSEL</u>SPL <u>MILFINTIRDM</u>CIDTNPISVNVK RFESEETMIRHLIRLQKELGQSN AAESLSSDSNIFQPSFVLSLPAY AQKFYNGGADML<u>GKDALAEAA</u> <u>KQLSLAVQYMVAEAVTCNIPIPL</u> PFNQQLANNYMTLLLK<u>HATLP</u> <u>NIQSAVESRR</u>FPHINMINDLINAV IDDLFAGGGDYHYVLNEKNRA RVMSLKENVAFPLASANIFN YMAELATRAGKQPSM<u>FQ</u>NATFL <u>TSAANAVNSPAAHLTK</u>SACQES LTELAFQNETLRREFIQOINYNK <u>DANAIIAAA</u>PNATRPNTKGR TA</p>		3
83	p91	1				4
94	ODV-E25	3	<p>MWGIVLLIVLLILFYLYWTNA LNFNSL TESSPSLGQSSDSVEL DENKQLNVKLNNGRVANLR<u>I</u> <u>AHGDNKLSQVYIAEKPLSIDD</u> <u>IVKEGSNKVGTNSVFLGTVYD</u> <u>YGIKSPNAASTSSNVTMTRGA</u> <u>ANEDIKEFKSMEIVEK</u>GVTP KT<u>VEDNGMLRFEVDNMIVCL</u> IDPNTAPLSEREVRELKSNCT LVYTR<u>NAAAQVLENNFTV</u> <u>INAEQTAYLKNYSYREMN</u> ‡LSQVYIAEKPLSIDDIVK sequence obtained by MS/MS</p>	<p>MWGIVLLIVLLILFYLYWTNAL LNFNSL TESSPSLGQSSDSVELDE NKQLNVKLNNGRVANLR<u>IAHG</u> <u>DNKLSQVYIAEKPLSIDDIVKEG</u> <u>SNKVGTNSVFLGTVYDYGIKSP</u> NAASTSSNVTMTR<u>GAANFEDIK</u>E FKSMFIVFKGVTPKTVEDNGM LRFVDNMIVCLIDPNTAPLSER EVRELKSNCTLVYTRNAAAQ VLENNFTVINAEQTAYLKNYK SYREMN</p>		5 6
138	p74		MAVLTAVDLTNASRY <u>AIIHMH</u>			7

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			<p> <u>R</u>LEFISRWTRFRPHILIDYTLR PASSDDDDYYVPPKLADKAAV KLAFSKRGCVSMSCYPFHETG VVSNTTFFMYMQTSETSVGY AQPACYHLDRAAAMREGAET <u>QVQSAEFR</u>YTLDNKCILVDSL SKMYFN<u>SPYLR</u>TEEHTIMGVD DVPAFNVRPDPDPLPERFKG EFNEAYCRRFGRELFNGGCSF RWWESLIGFVLGDTIFVTFKM LANNIFSELRDFDYKAPSSILP PRPNVDSNAILAQWRSVRDN ATDLEFEKLFNKNPTLNDLG MIVNGSPVQITYTAETGFTKT <u>PIAYNYR</u>GENER<u>ARVEHFEALD</u> <u>RSISDQDLES</u>IITSFLEDYALVF GIATDIGFDMLMSGFKSMLK K<u>INTSLIPAMK</u>HMLLSTTRRV TVRMLGETYKAALVHSLNVI AIKTLTVTAKALTRIAIQASSI VGIVLILLTLADLVLALWDPF GYNNMFPREFPDDMSR<u>TFLT</u> <u>AYFESEDNTTSRE</u>IEEFMPEFFS EMVETDDDATFESLFHLLDY VASLEVNSDGQMLNLEEGDEI EDFDESTLVGQALATSSLYTR <u>MEFMQY</u>TFRQNTLLSMNKEN NNFNQIILGLFATNTIVAFTAF VIHTELIFFIFFVIFLMITFYII KESYEYYKTIDLLF ‡ all peptide sequences obtained by MS/MS </p>			
143	ODV-E18		<p> <u>MIYTDPTTGATTSTDAPSTNY</u> <u>LNRLTPNMFL</u>TILAVVVIIALII IFVQSSNGNSSGGNVPPNAL GGFVNPLNATMR<u>ANPEMNTP</u> <u>QRQML</u> </p>			8
148	ODV-E56	3	<p> MSFFSNLRAVNKLYPNQASFI <u>TDNTRLLTSTPAGF</u>TNVLNAP <u>SVRNIGNNRFOPGYQLSNNQF</u> <u>VSTSDINRITR</u>NNDVPIRIGVF </p>			9 10

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			<u>QGISDPQINSLSQLRRVDNVP</u> <u>DFNYHTKQTRSNAVKQNFPE</u> <u>TNVRTPEGVQNALQONPRLH</u> <u>SYMQSLKVGGTGILLATGGY</u> FLFSAATLVQDIINAINNTGGS YYVQGKDAGEIAEACLLQR TCRQDPNLNQSDVTICPFDPL LPNNPELTNMCQGFNYEVE KTVCRGSDPSADPSPQYVDI SDLPAGQTLMCIEPYSFGDLV GDLGLDWLLGDEGLVGKSSN VSDSVSGKLMPIILLIGAVLFL <u>GLIFYFIYRYMMKGGGGGGV</u> <u>GAATSPTPIVISMQNPTTAP</u> <u>R</u> ‡ PDFNYMTK; TPEGVQNALQQNPR; LYPNQASFIYDNTR; FQPGYQLSNNQFVSTSDINR sequence obtained by MS/MS			

‡ MS/MS analysis of SDS-PAGE in-gel digestion

- tegument localization # p91 associates with viral envelope and nucleocapsid.

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