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ORF2-3 -----MNIKGNHHYSLISLNINGLNSPIKRRHRLTNWIRNEDPAFCCLQETHLRDKDRHYLRVKGWKTTFQANGQKKQAGVAILISNKINFOLKVIKDKKEGHFIFIKGKIHOEDELSSILNIYAPNTRAPTIVVKEILLKLTHTIAPHPTIIV 145
ORF2-23 -----MNIKGNHHYSLISLNINGLNSPIKRRHRLTNWIRNEDPAFCCLQETHLRDKDRHYLRVKGWKTTFQANGQKKQAGVAILISNKINFOLKVIKDKKEGHFIFIKGKIHOEDELSSILNIYAPNTRAPTIVVKEILLKLTHTIAPHPTIIV 145
ORF2-8 -----MNIKGNHHYSLISLNINGLNSPIKRRHRLTNWIRNEDPAFCCLQETHLRDKDRHYLRVKGWKTTFQANGQKKQAGVAILISNKINFOLKVIKDKKEGHFIFIKGKIHOEDELSSILNIYAPNTRAPTIVVKEILLKLTHTIAPHPTIIV 145
ORF2-13 -----MNIKGNHHYSLISLNINGLNSPIKRRHRLTNWIRNEDPAFCCLQETHLRDKDRHYLRVKGWKTTFQANGQKKQAGVAILISNKINFOLKVIKDKKEGHFIFIKGKIHOEDELSSILNIYAPNTRAPTIVVKEILLKLTHTIAPHPTIIV 145
mORF2 MPPLTITKITGSNNYFSLISLNINGLNSPIKRRHRLTNWIRNEDPAFCCLQETHLRDKDRHYLRVKGWKTTFQANGMKKQAGVAILISDKIDFQPKVIKDKKEGHFIFIKGKIHOEDELSSILNIYAPNTRAPTIVVKEILLKLTHTIAPHPTIIV 150
horF2 -----MTGSNSHTITILNLINGLNSAIKRRHRLASWIKSQDPSVCCQETHLTCRDRHLRKKIKGWRKIYQANGKQKAGVAILVSDKIDFKPTKIKRDKKEGHYIMVKGSIQOEBELTILNIYAPNTRAPTIVVKEILLKLTHTIAPHPTIIV 143
ruler 1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150

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ORF2-3 GDFNTPLSMMDRSWKOKLNSDVDRLEVMQMDLTDIYRTFYPKAKGYTFFSAPHGTFISKIDHIIQKTLNRYRRIEIIIPCVLSDHHLGLKLVFNN-NKGRMPTYTWKLNALLNDNLVKEEIKKEIKNFLEFNEEDTTPYSLWDTMKA 294
ORF2-23 GDFNTPLSMMDRSWKOKLNSDVDRLEVMQMDLTDIYRTFYPKAKGYTFFSAPHGTFISKIDHIIQKTLNRYRRIEIIIPCVLSDHHLGLKLVFNN-NKGRMPTYTWKLNALLNDNLVKEEIKKEIKNFLEFNEEDTTPYSLWDTMKA 294
ORF2-8 GDFNTPLSMMDRSWK-KLNSDVDRLEVMQMDLTDIYRTFYPKAKGYTFFSAPHGTFISKIDHIIQKTLNRYRRIEIIIPCVLSDHHLGLKLVFNN-NKG-DATYTWKLNALLNDNLVKEEIKKEIKNFLEFNEEDTTPYSLWDTMKA 292
ORF2-13 GDFNTPLSMMDRSWKOKLNSDVDRLEVMQMDLTDIYRTFYPKAKGYTFFSAPHGTFISKIDHIIQKTLNRYRRIEIIIPCVLSDHHLGLKLVFNN-NKGRMPTYTWKLNALLNDNLVKEEIKKEIKNFLEFNEEDTTPYSLWDTMKA 294
mORF2 GDFNTPLSMMDRSWKOKLNRDITLKLTEVMQMDLTDIYRTFYPKAKGYTFFSAPHGTFISKIDHIIQKTLNRYRRIEIIIPCVLSDHHLGLKLVFNN-NKGRMPTYTWKLNALLNDNLVKEEIKKEIKDFLEFNEEDTTPYSLWDTMKA 300
horF2 GDFNTPLSITLHRSTRQKVNKDTQELNSALYQADLTDIYRTFYPKAKGYTFFSAPHGTFISKIDHIIQKTLNRYRRIEIIIPCVLSDHHLGLKLVFNN-NKGRMPTYTWKLNALLNDNLVKEEIKKEIKDFLEFNEEDTTPYSLWDTMKA 293
ruler .....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300

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ORF2-3 VLRGKLIALLSACRKKQERAYVSSMTAHLKALEQKEANTPRRSRROEIIKLRAEINQVETKRTTIERINRITKSWFFEKINKIDKPLARLARGHRECVQINKIRNEKGDITTDSEETQKIIRSYYKNLYSTKFNLEQEMDYFLDRYQVSKLNQ 444
ORF2-23 VLRGKLIALLSACRKKQERAYVSSMTAHLKALEQKEANTPRRSRROEIIKLRAEINQVETKRTTIERINRITKSWFFEKINKIDKPLARLARGHRECVQINKIRNEKGDITTDSEETQKIIRSYYKNLYSTKFNLEQEMDYFLDRYQVSKLNQ 444
ORF2-8 VLRGKLIALLSACRKKQERAYVSSMTAHLKALEQKEANTPRRSRROEIIKLRAEINQVETKRTTIERINRITKSWFFEKINKIDKPLARLARGHRECVQINKIRNEKGDITTDSEETQKIIRSYYKNLYSTKFNLEQEMDYFLDRYQVSKLNQ 442
ORF2-13 VLRGKLIALLSACRKKQERAYVSSMTAHLKALEQKEANTPRRSRROEIIKLRAEINQVETKRTTIERINRITKSWFFEKINKIDKPLARLARGHRECVQINKIRNEKGDITTDSEETQKIIRSYYKNLYSTKFNLEQEMDYFLDRYQVSKLNQ 444
mORF2 FLRGKLIAMSAFKKRRERHTSSLTTHLKALEKKEANSPKRRSRROEIIKLRGEINQVETRTTIQRINQIRSWFFEKINKIDKPLARLARGHRECVQINKIRNEKGDITTDSEETQKIIRSYYKRLYSTKFNLEQEMDYFLDRYQVSKLNQ 450
horF2 VCRGKFIALNAYKRRQERSKIDITLISOLKELEKQETHSKASRROEIIKIRAELEKIEETQKTLQKINERSWFFERINKIDRPLARLIRKKEKKNQIDITIKNDKGDITTDSEETQKIIRSYKHLVANKLENEEMDTFLDTYTLPLRLNQ 443
ruler .....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450

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ORF2-3 EQINQLNPNITPKIEAVIKGLPTKKSPPGPDGFSAEFYQTFIEDLIPILSKLFHKIETDGAIPNSFYESTITLIPKPKHDTTKKENFRPISLMNIDAKILNKILANRIQEHIKTIHHDQVGFIPGMQGWFNIRKTIINVIHYINKLKEQN 594
ORF2-23 EQINQLNPNITPKIEAVIKGLPTKKSPPGPDGFSAEFYQTFIEDLIPILSKLFHKIETDGAIPNSFYESTITLIPKPKHDTTKKENFRPISLMNIDAKILNKILASRIQEHIKTIHHDQVGFIPGMQGWFNIRKTIINVIHYINKLKEQN 593
ORF2-8 EQINQLNPNITPKIEAVIKGLPTKKSPPGPDGFSAEFYQTFIEDLIPILSKLFHKIETDGAIPNSFYESTITLIPKPKHDTTKKENFRPISLMNIDAKILNKILANRIQEHIKTIHHDQVGFIPGMQGWFNIRKTIINVIHYINKLKEQN 592
ORF2-13 EQINQLNPNITPKIEAVIKGLPTKKSPPGPDGFSAEFYQTFIEDLIPILSKLFHKIETDGAIPNSFYESTITLIPKPKHDTTKKENFRPISLMNIDAKILNKILANRIQEHIKTIHHDQVGFIPGMQGWFNIRKTIINVIHYINKLKEQN 594
mORF2 DVVDLLNSPTPKIEAVINSLEPAKKSPPGPDGFSAEFYQTFEKEDLTPVLHLKLFHKIEVGEGLIPNSFYESTITLIPKPKHDTTKKENFRPISLMNIDAKILNKILANRIQEHIKTIHHDQVGFIPGMQGWFNIRKTIINVIHYINKLKEQN 600
horF2 EEVESLNRPTIGSEIVAIINSLEPAKKSPPGPDGFTDEFYQRYKEELVPLFLKLFQSEKKEGILPNSFYESTITLIPKPKHDTTKKENFRPISLMNIDAKILNKILANRIQEHIKTIHHDQVGFIPGMQGWFNIRKTIINVIHYINKLKEQN 593
ruler .....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600

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ORF2-3 HMIISLDAEKAFDKIQHPFMIKVLERIGIQGPVYLNIVKAIYSKPVANIKLNGEKLEAIPKSGTRQGCLSPVLFNIVLEVLARAIROQKEIKGQIQGKEEVKISLFADDMIVYLSDPKSSRELLKLINNFASKVAGYKINSKNSVAFLY 744
ORF2-23 HMIISLDAEKAFDKIQHPFMIKVLERIGIQGPVYLNIVKAIYSKPVANIKLNGEKLEAIPKSGTRQGCLSPVLFNIVLEVLARAIROQKEIKGQIQGKEEVKISLFADDMIVYLSDPKSSRELLKLINNFASKVAGYKINSKNSVAFLY 743
ORF2-8 HMIISLDAEKAFDKIQHPFMIKVLERIGIQGPVYLNIVKAIYSKPVANIKLNGEKLEAIPKSGTRQGCLSPVLFNIVLEVLARAIROQKEIKGQIQGKEEVKISLFADDMIVYLSDPKSSRELLKLINNFASKVAGYKINSKNSVAFLY 742
ORF2-13 HMIISLDAEKAFDKIQHPFMIKVLERIGIQGPVYLNIVKAIYSKPVANIKLNGEKLEAIPKSGTRQGCLSPVLFNIVLEVLARAIROQKEIKGQIQGKEEVKISLFADDMIVYLSDPKSSRELLKLINNFASKVAGYKINSKNSVAFLY 744
mORF2 HMIISLDAEKAFDKIQHPFMIKVLERIGIQGPVYLNIVKAIYSKPVANIKVNGEKLEAIPKSGTRQGCLSPVLFNIVLEVLARAIROQKEIKGQIQGKEEVKISLFADDMIVYLSDPKNSNRELLNLSFGEVAGYKINSKNSMAFLY 750
horF2 HMIISLDAEKAFDKIQHPFMIKVLERIGIQGPVYLNIVKAIYSKPVANIKVNGEKLEAIPKSGTRQGCLSPVLFNIVLEVLARAIROQKEIKGQIQGKEEVKISLFADDMIVYLSDPKNSNRELLNLSFGEVAGYKINSKNSMAFLY 743
ruler .....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750

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