

The protein sequences of OFP family in *Fragaria vesca*

>FvOFP1 FvH4_1g04770.t1

MHLYTPPTLLFPKPKSSSVLILSLKLLCFSNLCTFLSKMENRFKLKLSRMFHKASLGTCSRSLSDVIEKAVFLPQNCN
TSTDSPPKPAPPPPKPFAICRPKCSDDPKQQPINHRCVISRSNTDMLPRRKIFERRSPFVKSEIPPNPLFSNSNPFY
EVHESHFRQRKKRGSKKKKRSQKSDISSLDSNHYYHNGWSSSEDEEKEDETDTLFSSNHTSDSSGSRRLRSSR
GKAQSFGRRRGSSVCSEVGLMPLQGKVKDSFAVVKSSDPYNDFRTSMVEMIVEKQIFSGKDLEHLLQCFLKLNSPHHH
RVIIIEVFTEIWEALFSNLGT*

>FvOFP2 FvH4_1g09620.t1

MVEAREHQTEDESVKVKSNEWFLHELLLCYLALNPKSTHKFIIGAFSDLLVSLLPSPKDPEFTAGVCEISRCS*

>FvOFP3 FvH4_1g13640.t1

MAKRFRRLIRSVIPSFQSCRKDPSSLPSNPVPSFLRPSPLNHHLSTPPSKPHYSSSIKRHVSSAFGCGFGTKPTLSD
DDNGSLPPEVFEWEREDKWHVAMVDEDKTPRRKIYTSSASADSERDDAVSLSFSPPPPPSSAEKKKKQRLRKKKT
TSRMIRFSTSSAESGLFSDDEENETLFSFSTDSSADIFTRHLATIRETPRRRKKIKSKAKRSVSRSTSGEFESRPLSV
FQRLIPCSDVGKVRSEFAVVKKSEDPYEDFKRSMEMILEKQMFHEKELEQLLHCFLSLNAREHHRVIVQAFSEIWEGL
FCGSARSSGARVSRL*

>FvOFP4 FvH4_2g23310.t1

MPSTLGRNLNLCFTKIKRPLLTLQSPVDDHRSPPTTTSTVSTAMSSSTVIKNFNSLYDGDHAFDSTATSSSIKSSDL
STTETENDTDTAAADFATVFASQRFFFSPPGRSNSIVDQSSSSSSSDLHAPFKHNSVAVPTYSPDPYLDFRSMQEM
VEAREHQTEDESVKVKSNEWFLHELLLCYLALNPKSTHKFIIGAFSDLLVSLLPSPKDPEFTAGVCEISRC*

>FvOFP5 FvH4_3g01350.t1

MKSSRQHKKQPQLNRRAPIRALCCSSCRLSVSSSSEQEVESSSTSDRNRYPSISSIAHAMVQERLDQVIRERQEEEA
AHVDRRRRKNKAIYDDRAQGTGTFVVMVAMEKCSYDPREDFRESMEEMIMAKRIECPKDLRSLNYYVSMNSEEYHEI
ILEVFHEVCSDLFLCKCH*

>FvOFP6 FvH4_3g07180.t1

MKWGSSRNKKPPPSFASSTTSKPSLISHVPSSWLSKFKQKTGNSEPKPGKVNQKGKRNPSPLSSSPRIAREGGGRF
YGGDDGDDGYWRLSFGEDSVEGEKKSRGVLRSVRYESEEFEARPSKVTGMSKGGNAEERKLKRGNEGVTGKKRLELKG
EAEEPEERSKKTGEEDDVLEMLAARIILTKEKDSNKHGLTSGARKYRYASSNLKTIEEEVSEEKPTSDWQKLKEMKIQE
VMAKSEKHRKSVYISRDLQRKSRPKRSNKVRVCSPTASRVEICKIKALQDMAKAKKAERKVKVVRTGLDSFAVVKC
SFDPPQDFRDSMVEMIVEKKLTRPDDLEELLACYLTLNSDEYHDLIIKVFRQVWFDLNQTYFGSELQNDQCCND*

>FvOFP7 FvH4_3g25970.t1

MSSTKTKFLKTLVTSNIRGCGCRPKLSDVYEPTAKPKIPICKINSNHQIPHSSSSCDMRNGSFTVDEDEDQCTST
TISFNNDSTVSSSQPSDAEIHCSNKSPPIPPQTKIDNSIAVVKSDNPYQDFRRSMLQMIVEKEIYSKEELQELLSC
FLELNSRHHDVIIQAFTEIWNGDLVDIARKRSVRVNPRCGTCEDHKPCEALN*

>FvOFP8 FvH4_3g40310.t1

MGNYRFRADMIPNAWFYKLTMSKTRKHNTTSPKKKPPTSSFPQRTTHLSQTRYSYIITDQQPNRDERFFYNSPTC
PKGSDTNFPEQPRRSSTKRSRRKAVYRPSPKKHVISSSVSSGHCSCQCHASTPESLDYFGSSSSERNSTETHDFHELIP
SEFESDQLGASEFGSYSCRVSSTSDTIIDKKKEGSTNKVHDFRDMISELELPPILTKPTKLDDRSKAESTKFRKSTS

SKLKETKGHQSLSVKIVKEERSSSRIQKDQKTAAPYVRNSSASPTGIRLRGNSPRLASKKLQQPFGSKKSVSKNRGGIS
DSFAVVKSSLDPQRDFKDSMREMIMENNIKESKDLEDLLACYLSLNSREYHDLIVKA FEQIWFDMARIKI*

>FvOFP9 FvH4_4g15660.t1

MSKLPWKKNLHLCLPNFKCLPLITQNPPQPSDHDHPHPNPPLMITNNINSLYHHDSNSSDQSTSKSLTASDDFFYSSSS
DSEAATDSPPDFATVFASQRFFFSSPGRSNSIVESPDTKPNCNDSFVTRGVTVAKYSSNPYLD FRKSMEEMLEARDRDH
IDNKDRNHNVVDVLKSDLDYLHELLLCYLQLNPGDAHKDIISAFTDLVICILSANPAASTSSSADDDHIKEEKEEIQRQ
CAS*

>FvOFP10 FvH4_6g10140.t1

MGKYKFRLSDMIPNAWFYKDKMSKTRKNQSSNSHPKKRNQPPPSTFASSAKPTSPA KPKQVTHHHCHHSRKSYYFT
RELNNSTGENRPLCNTPVNPKVSTTNLTHEPPRKSSIQKQRKSSNSKLAMSTSSSVSAGCRASIESVWTKSDSLPEEQ
WSTSSSLDSSLEFHHTDSLEFRCDRILATETFDGMNSMTSSNEKDIIIDVNSSEKKKLD SFSDELPRITKPE SFN
EMVCEVKKKKKENKEQQPIKSRKSSHGSENNKEHRTSSVRRVTSSTSPGVKLRTNSPRIANRKINQAQVGRRSLSSNS
SKRRSLSESFAIVKSSFD PQRDFRESMIEMIMENNIKASKDLEDLLACYLSLNANEYHELIIKVFKQIWFDLTDIQSKG
FSGSSFFSTPILEKLYLWR*

>FvOFP11 FvH4_6g19870.t1

MKLLPSSLFKNTAPAPEPKSSSSSWPWPSCTQTRTISFRIPGNDMFKTINSAYFDTNTPESFFTN SSEGCAFSTTVSE
EDSSGGGGDPIETVINKGLRSERLFFDGETSSILDKDSIKAREEEEEEEEDDDGVDELAGDDNIPKESVALSMD S
PDPYVDFRKSMEEMVEAHGLKDEHLEELLCWYLRVNGKSNHGYIVGAFVDLLVGLAFSTSI PPPSCSCSEYSPSTPLS
FYTSTTSCSSSTSTPCVSSIGPEDGSEMSTSTIPYLSLLEAEEEEINEEDDDDDGASS*

>FvOFP12 FvH4_6g19871.t1

MSLP SRETISLSLKRKTRAVIIASTGTPQESSGELTCTLLYTHSHHSPHPSSSSQLSL FFFFFFFF SFFCFTPSPT
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FSDHETVAKTATPVKGFGRVGGESVAVEKDSGDPYLD FRHSMLQMILENEIYSKDDLRELLNCF LQLNAPCNHGIIIRA
FTDIWNGVFSVRSSAATMQLRLARKSRDY*

>FvOFP13 FvH4_6g31210.t1

MTKKLQKRLQDYLT KIKKPSPALIPISKKWMRTCKHPKTL SFAINNTETTQDKDDAATLS DIDEFLFENFRSLYL RD
DDQGADTTDENERKREEKTLEMKGHEKESANEPFWDKPLHLKKRSPDQHETQNQDGFLFESPRLNIDPPAADLCSSHR
FSVSPGRLSSSVRTSTTTTTTSEDAGSSMTSTRTLNVDSP TTSNNDHHVALPTDCISVLMYSPNPGYEFKRSMHD
MVEARLRNNAKVDFMEELLFCYLNLNKKKSHRFILSAFADLVDMRQSDTVLERSRKL*

>FvOFP14 FvH4_7g33090.t1

MDHVTEEQNRRRRRKEILQSRSGKFSFSARLPDDVHG VFAGSMCLVKYTTDPLLDIRESILEMLQYA QGVCDWNDVEEL
VYCYISLNSSEVHELVGQAFLSLCSS*