

[illegible]

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|--|------------|-------------|---|
| | Polyphenic | A_pisl | -----GGGVAAAAAGIGGGGVGGLMSYNRGRGGTEVIIKPRSPAVLQVTTGGGYH |
| | Polyphenic | G_buel+4 | ----- |
| | Monom. | apt C_hookl | ----- |
| | Monom. | apt M_extl | ----- |
| | Monom. | apt C_lecl | ----- |
| | Polyphenic | F_exsl | -----DTANGTAAASVASVAAIASVV-----GGT-----ASTLVKAERPDH |
| | Polyphenic | N_lugl | QNLPTEPTQLRNLSPLPNPHQ--NLQRTSTLLQNQPSEPTPLQNLPKPTQL |
| | Monom. | mac D_mell | QQL---AASAGPSSSVS-----LSPSSSAALTLHVASANG |
| | Monom. | mac D_siml | QDLWL---CGNESGSFGGSNGHG-----LNQQQSIVITLAMHGCS |

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|------------|-------------|------------|------------|-------------|-----------|-------|-------------|------------|
| Polyphenic | A_pisl | VPPSRNGCST | LFSDIAGVKR | LRPDDW--LA | VN---- | SP-- | PASSPGTS | -HISYTVISN |
| Polyphenic | G_buel+4 | APQ----- | ----- | -----EDWPIA | YV----- | SP-- | ----- | ----- |
| Monom. | apt C_hook1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt M_ext1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt C_lec1 | ----- | ----- | -----MWVRG | YA----- | MR-- | ----- | ----- |
| Polyphenic | F_exs1 | SPQSS---LQ | SQHVVYTVSQ | QQLSEQPPVA | HS----- | SPH | QQVS----- | ----- |
| Polyphenic | N_lug1 | NPQSE---ST | HATTTMLVKR | EQLDDTTPLR | GG----- | SPR | GSPTPQGGLR | -GSSWPPSPR |
| Monom. | mac D_mell | KPNSTAAPST | SAAAANGHLV | LVPNKRPRLD | VTEDWMSTP | ----- | SPGSVPSSA | PPLSPSPGS- |
| Monom. | mac D_sim1 | -----M | LNGGLNGMQQ | QIQNGHGLIN | ST----- | TP-- | -----STPTTP | LHLQQNLGGG |

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|------------|-------------|------------|------------|-----------|--------|------------|------------|-----|----|------|------|----------|
| Polyphenic | A_pisl | GGGGG--GG | GGGGGGGGYN | TSPMST--N | | | | | | SYP | YSPM | -- |
| Polyphenic | G_buel+4 | | | SNGYS | SPTTSA | -G | | | | SYEP | YSP | |
| Monom. | apt C_hookl | ----- | ----- | | | | | | | | | |
| Monom. | apt M_extl | ----- | ----- | | | | | | | | | |
| Monom. | apt C_lecl | ----- | ----- | EEGCD | QVTSSC | -- | | | | | | SPGVDDLE |
| Polyphenic | F_exsl | ----- | ----- | NNGYA | SP_MST | -G | | | | SYP | YSP | |
| Polyphenic | N_lugl | DMTPS--YG | GGGTPLNGYP | SPTMSSQH | S | | | | | NYDS | CLSP | -- |
| Monom. | mac D_mell | --QN | HSYNMSNGYA | SP-MSA | -G | | | | | SYP | YSP | -- |
| Monom. | mac D_siml | GGIGGMGILH | HANGTPNGLI | GV-VGG | -GG | GVVLGVGGGG | VGGLGMQHTP | RSD | -- | | | |

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|------------|----------|------------|--------------|--------------|-------------|------------|
| Polyphenic | A_pisl | -----S | G-----KIVKEE | LSPPNSLSGV | ----- | ----- |
| Polyphenic | G_buel+4 | -----N | N-----KLGRED | LSPVGSNLGY | ----- | ----- |
| Monom. apt | C_hook1 | -----M | GELERA | T-----YRCRED | LSPPNSLNLY | ----- |
| Monom. apt | M_ext1 | -----M | F-----VSGRED | LSPPNSLNLY | ----- | ----- |
| Monom. apt | C_lec1 | LWDLGLGPGP | RGIQLSEHRG | D-----ISGRED | LSPPNSLNLY | ----- |
| Polyphenic | F_exs1 | -----N | G-----KIGRDE | LSQSGSINGY | GNNSSGGGNCG | GGGGGNCNGS |
| Polyphenic | N_lug1 | -----N | S-----KIGRED | LSPSSSLNGY | G----- | GGGGPGG-- |
| Monom. mac | D_mell | -----T | G-----KTGRDD | LSPSSSLNGY | ----- | ----- |
| Monom. mac | D_sim1 | -----S | VNSISSGRDD | LSPSSSLNGY | ----- | ----- |

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|---------------------|---|
| Polyphenic A_pis1 | -SS-HS-DGL KKKKLNHSPV TGVNTAASG PGGVGGNVL NNRPPEELCL VCGDRSSGYH |
| Polyphenic G_buel+4 | -SA-DSCDGS KKKK-----TG----G PQ-----QRQQEELCL VCGDRASGYH |
| Monom. apt C_hook1 | -SL-DGSD-A KKKK-----PA-----PRQQEELCL VCGDRASGYH |
| Monom. apt M_ext1 | -SL-DGSD-A KKKK-----G PA-----PRQQEELCL VCGDRASGYH |
| Monom. apt C_lec1 | -SA-DSCDGS KKKK-----G TA-----VRQQEELCL VCGDRASGYH |
| Polyphenic F_exs1 | GTS-EGCD-A KKrk-----G PT-----PRQQEELCL VCGDRASGYH |
| Polyphenic N_lug1 | GSM-LPSLA KKKK-----G PV-----PRQQEELCL VCGDRASGYH |
| Monom. mac D_mell | -SANESCAAK KSkk-----G PA-----PRVQEELCL VCGDRASGYH |
| Monom. mac D_sim1 | -SANESCAAK KSkk-----G PA-----PRVQEELCL VCGDRASGYH |

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|------------|-------------|------------|------------|------------|------------|------------|------------|
| Polyphenic | A_pis1 | YNALTCEGCK | GFFRRSITKN | AVYQCKYGNN | CEIDMYMRRK | CQECRLKKCL | TVGMRPEC-- |
| Polyphenic | G_buel+4 | YNALTCEGCK | GFFRRSITKN | AVYQCKYGNN | CEIDMYMRRK | CQECRLKKCL | SVGMRPEC-- |
| Monom. | apt C_hook1 | YNALTCEGCK | GFFRRSITKN | AVYQCKYGNN | CEIDMYMRRK | CQECRLKKCL | SVGMRPEC-- |
| Monom. | apt M_ext1 | YNALTCEGCK | GFFRRSITKN | AVYQCKYGNN | CEIDMYMRRK | CQECRLKKCL | SVGMRPELDV |
| Monom. | apt C_lec1 | YNALTCEGCK | GFFRRSITKN | AVYQCKYGNN | CEIDMYMRRK | CQECRLKKCL | SVGMRPEC-- |
| Polyphenic | F_exs1 | YNALTCEGCK | GFFRRSITRN | AVYQCKYGNG | CEIDMYMRRK | CQECRLKKCL | TVGMRPEC-- |
| Polyphenic | N_lug1 | YNALTCEGCK | GFFRRSITKN | AVYQCKYGNN | CEIDMYMRRK | CXXCRLKKCL | SVGMRPEC-- |
| Monom. | mac D_mell | YNALTCEGCK | GFFRRSVTKS | AVYCKCFGRA | CEMDMYMRRK | CQECRLKKCL | AVGMRPEC-- |
| Monom. | mac D_sim1 | YNALTCEGCK | GFFRRSVTKS | AVYCKCFGRA | CEMDMYMRRK | CQECRLKKCL | AVGMRPEC-- |

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|------------|-------------|------------|------------|------------|------------|------------|------------|
| Polyphenic | A_pis1 | ----- | --VVPEVQC | AVKRKE-KKA | QREKDKPNST | ----- | --T-DISPEI |
| Polyphenic | G_buel+4 | ----- | --VVPEYQC | AVKRQEKKKQ | QKDKDKHVST | ----- | --T-NGSPEV |
| Monom. | apt C_hook1 | ----- | --VVPEYQC | MVKRKE-KKA | QKDKDKPNST | ----- | --T-NGSPEM |
| Monom. | apt M_ext1 | LYNCHISIGC | VPGVVPEYQC | MVKRKE-KKA | QKDKDKPNST | ----- | --T-NGSPEM |
| Monom. | apt C_lec1 | ----- | --VVPEYQC | AVKRKE-KKA | QKDKDKPVST | ----- | --T-NGSPEA |
| Polyphenic | F_exs1 | ----- | --VVPEYQC | AVKRKE-KKA | QKEKDKPNST | ----- | --TMNGSPGS |
| Polyphenic | N_lug1 | ----- | --VVPEYQC | AVKRKE-KRD | MKDKTRPNST | ----- | --T-SRSPEA |
| Monom. | mac D_mell | ----- | --VVPENQC | AMKRRE-KKA | QKEKDKMTTS | PSSQHGGNGS | LAS-GGGQDF |
| Monom. | mac D_sim1 | ----- | --VVPENQC | AMKRRE-KKA | QKEKDKMTTS | PSSQHGGNGS | LGS-GGGQDF |

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|------------|-------------|------------|-------|-------------|------------|-------|-------------|
| Polyphenic | A_pis1 | ----- | IK | IEPTTEMKIEC | GEPMIMGTPM | ----- | ----- |
| Polyphenic | G_buel+4 | ----- | IK | SEPEQ | PPGVSSLT | ----- | LTSWPPEEVK |
| Monom. | apt C_hook1 | ----- | VG | IKDP | ----- | ----- | E HKQVEPEKL |
| Monom. | apt M_ext1 | ----- | VG | IKDS | ----- | ----- | D TKQLEPEKL |
| Monom. | apt C_lec1 | ----- | IK | VEPE | ----- | ----- | ----- |
| Polyphenic | F_exs1 | AGIGDQMGVK | IEPAE | ----- | AESLSVSGS | ----- | ----- |
| Polyphenic | N_lug1 | ----- | LK | IEPE | ----- | ----- | ----- |
| Monom. | mac D_mell | ----- | VK | KEILDL-MTC | EPPQHATIP | LP | ----- |
| Monom. | mac D_sim1 | ----- | VK | KEILDL-MTC | EPPQHATIP | LP | ----- |

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|------------|-------------|------------|------------|------------|-----------|------------|------------------|
| Polyphenic | A_pis1 | -PTVPYVKPL | SSEQKELIHR | LVYFQDQYEA | PSEKDMKRL | TINNQNMDY | DEEKQSDTTY |
| Polyphenic | G_buel+4 | LVNQNGVKPV | SPEQEELIHR | LVYFQNEYEH | PSEDIRRI | ----- | DTE-EADMKF |
| Monom. | apt C_hook1 | PV-LNGVKPV | SPEQEELIHR | LVYYQNEYEQ | PSEDDLKRI | ----- | TNTPD DGEDQSDVKF |
| Monom. | apt M_ext1 | PM-LNGVKPV | SPEQEELIHR | LVYYQNEYEQ | PSEDDLKRI | ----- | TNTPD DGEDQSDVKF |
| Monom. | apt C_lec1 | KVAVNGIKQV | SAEQEELIHR | LVYFQNEYEH | PSDEDVRI | ----- | NTPN DEEQSDLKVF |
| Polyphenic | F_exs1 | VSPYTCVKPI | SPEQEELINR | LVSFQCFEQ | PSEEDLKRI | ----- | TNQPL EGEDPSDYSF |
| Polyphenic | N_lug1 | PLTAGGVKPV | SSEQEELIHR | LVYFQNEFEH | PSEEDLKRI | CLNLPSQVAP | DQQAESDMRF |
| Monom. | mac D_mell | KCOARNIPSL | TYNQLAVIYK | LIWYQDGYEQ | PSEEDLRRI | ----- | MSQPD ENESQTDVSF |
| Monom. | mac D_sim1 | KCOARNIPSL | TYNQLAVIYK | LIWYQDGYEQ | PSEEDLRRI | ----- | MSQPD ENESQTDVSF |

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|------------|-------------|------------|------------|------------|------------|------------|------------|
| Polyphenic | A_pis1 | RIITEITILT | VQLIVEFAKR | LPGFDKLVRE | DQITLLKACS | SEAMMFRVAR | KYDITTDISV |
| Polyphenic | G_buel+4 | RHITEITILT | VQLIVEFAKR | LPGFDKLVRE | DQIALLKACS | SEVMMLRMAR | RYDATSDSIL |
| Monom. | apt C_hook1 | RHITEITILT | VQLIVEFAKR | LPGFDKLVRE | DQIALLKACS | SEVMMLRMAR | RYDVQSDSIL |
| Monom. | apt M_ext1 | RHITEITILT | VQLIVEFAKR | LPGFDKLVRE | DQIALLKACS | SEVMMLRMAR | RYDVQSDSIL |
| Monom. | apt C_lec1 | RHITEITILT | VQLIVEFAKR | LPGFDKLVRE | DQIALLKACS | SEVMMLRMAR | RYDAQSDSIL |
| Polyphenic | F_exs1 | RHITEITILT | VQLIVEFSKR | LPGFNELLRE | DQITLLKACS | SEVMMLRMAR | KYDVQSDSII |
| Polyphenic | N_lug1 | RHITEITILT | VQLIVEFAKR | LPGFDKLVRE | DQIVLLKACS | SEVMMLRTAR | KYDVNTDSIL |
| Monom. | mac D_mell | RHITEITILT | VQLIVEFAKQ | LPFAFTKIPQ | DQITLLKACS | SEVMMLRMAR | RYDHSSDSIF |
| Monom. | mac D_sim1 | RHITEITILT | VQLIVEFAKQ | LPFAFTKIPQ | DQITLLKACS | SEVMMLRMAR | RYDHSSDSIF |

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|------------|-------------|-------------|------------|-------------|------------|------------|------------|
| Polyphenic | A_pis1 | FANNQPF SAD | SYNKAGLGDA | IENQLSFSRF | MYNMKVDNAE | YALLTAIVIF | SSRPNLLDGV |
| Polyphenic | G_buel+4 | FANNQPYTRD | SYRMAGMGEV | VEDLLRF CRQ | MYNMKVDNAE | YALLTAIVIF | SERPSLLEAW |
| Monom. | apt C_hook1 | FANNQPYTKD | SYSMAGMGET | IDDLRF CRQ | MYSMKVDNAE | YALLTAIVIF | SERPSLLEAW |
| Monom. | apt M_ext1 | FANNQPYTKD | SYSMAGMGET | IDDLRF CRQ | MYSMKVDNAE | YALLTAIVIF | SERPSLLEAW |
| Monom. | apt C_lec1 | FANNQPYTRD | SYNMAGMDV | VEGLLRF CRQ | MYNMKVDNAE | YALLTAIVIF | SERPSLLEAW |
| Polyphenic | F_exs1 | FANNQPYTRD | SYNVAGMGET | IEDLLRF CRQ | MYAMRVNNAE | YALLTAIVIF | SERPNLLES |
| Polyphenic | N_lug1 | FANNQPYTRD | SYTLAGMGYD | MWDLRF CRH | MYRMKVDNAE | YALLTAIVIF | SDRPSLLEAW |
| Monom. | mac D_mell | FANNRSYTRD | SYKMAGMADN | IEDLLHF CRQ | MFSMKVDNVE | YALLTAIVIF | SDRPGLEKAO |
| Monom. | mac D_sim1 | FANNRSYTRD | SYKMAGMADN | IEDLLHF CRQ | MFSMKVDNVE | YALLTAIVIF | SDRPGLEKAO |

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|------------|-------------|------------|------------|------------|------------|------------|-------------|
| Polyphenic | A_pis1 | KVEKIQEIYL | ESLKAYVDNR | DRDTATVR | YARLLSVLTE | LRTLGNENSE | LCMTLKLKNR |
| Polyphenic | G_buel+4 | KVEKIQEIYL | EALKSYVDNR | VRPKSPTI | FAKLLSVLTE | LRTLGNQNSE | MCFSCLKLKNK |
| Monom. | apt C_hook1 | KVEKIQEIYL | EALKAYVDNR | RRPKSGAV | FAKLLSVLTE | LRTLGNQNSE | MCFSCLKLKNK |
| Monom. | apt M_ext1 | KVEKIQEIYL | EALKAYVDNR | RRPKSGAV | FAKLLSVLTE | LRTLGNQNSE | MCFSCLKLKNK |
| Monom. | apt C_lec1 | KVEKIQEIYL | EALKSYVDNR | ARRPKSPTI | FAKLLSVLTE | LRTLGNQNSE | MCFSCLKLQNR |
| Polyphenic | F_exs1 | KVEKIQEIYL | KTLKAYVDNR | RRPKSGTI | FAKLLSVLTE | LRTLGNQNSE | MCLNLKFKNK |
| Polyphenic | N_lug1 | KVEKIQEIYL | EALKSYVDNR | TRPKSSPI | FAKLLSVLTE | LRTLGNQNSQ | MCFSCLKLKNK |
| Monom. | mac D_mell | LVEAIQSYI | DTLRIYILNR | HCGDSMSLVF | YAKLLSILTE | LRTLGNQNAE | MCFSCLKLKNR |
| Monom. | mac D_sim1 | LVEAIQSYI | DTLRIYILNR | HCGDSMSLVF | YAKLLSILTE | LRTLGNQNAE | MCFSCLKLKNR |

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|------------|-------------|-------------|------------|------------|-----------|------------|------------|-------|
| Polyphenic | A_pisl | VVPPFLAEIW | DVMP | ---- | ----- | ----- | ----- | ----- |
| Polyphenic | G_buel+4 | NIPPFLLAEIW | DVNT | ---- | ----- | ----- | ----- | ----- |
| Monom. | apt C_hook1 | KLPPFLAEIW | DVMP | ---- | ----- | ----- | ----- | ----- |
| Monom. | apt M_ext1 | KLPPFLAEIW | DVMP | ---- | ----- | ----- | ----- | ----- |
| Monom. | apt C_lec1 | KLPPFLAEIW | DVNP | ---- | ----- | ----- | ----- | ----- |
| Polyphenic | F_exs1 | KLPPFLAEIW | DVMP | ---- | ----- | ----- | ----- | ----- |
| Polyphenic | N_lug1 | KLPPFLMEIW | DVDME | ---- | ----- | ----- | ----- | ----- |
| Monom. | mac D_mell | KLPPFLMEIW | DVHAIPPSVQ | SHLQITQEEN | ERLERAERM | ASVGGAITAG | IDCDSASTSA | |
| Monom. | mac D_sim1 | KLPPFLMEIW | DVHAIPPSVQ | SHLQITQEEN | ERLERAERM | ASVGGAITAG | IDCDSASTSA | |

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|------------|-------------|------------|-----------|------------|------------|-----------|------------|-------|
| Polyphenic | A_pisl | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | G_buel+4 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt C_hook1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt M_ext1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt C_lec1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | F_exs1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | N_lug1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | mac D_mell | AAAAAQHQPO | PPQPQPSSL | TQND SQHQT | OPQLOPO | LPPQLOQLO | PQLOPQLQTO | |
| Monom. | mac D_sim1 | AAAAAQHQPO | PPQPQPSSL | TQND SQHQT | PQLOPQLQPO | LPPQLOQLO | PQLOPQLQTO | |

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|------------|-------------|------------|------------|------------|------------|-----------|------------|-------|
| Polyphenic | A_pisl | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | G_buel+4 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt C_hook1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt M_ext1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt C_lec1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | F_exs1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | N_lug1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | mac D_mell | LQPOIQPOPO | LLP--VSAPV | PASVTAPGSL | SAVSTSSEYM | GGSAAGPIT | PATTSSITAA | |
| Monom. | mac D_sim1 | LQPOIQPOPO | LLPVSVSAPV | PASVTAPGSL | SAVSTSSEYI | GGSAAGPIT | PATTSSITAA | |

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|------------|-------------|------------|-----------|------------|------------|------------|------------|-------|
| Polyphenic | A_pisl | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | G_buel+4 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt C_hook1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt M_ext1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | apt C_lec1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | F_exs1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Polyphenic | N_lug1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Monom. | mac D_mell | VTASSTTSAP | PMGNVGVGV | GVGGNVSMYA | NAQTAMALMG | VALHSHQEQL | IGGVAVKSEH | |
| Monom. | mac D_sim1 | V----- | ----- | HFVSMYA | NAQTAMALMG | VALHSHQEQL | IGGVAVKSEH | |

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|------------|-------------|------|
| Polyphenic | A_pisl | ---- |
| Polyphenic | G_buel+4 | ---- |
| Monom. | apt C_hook1 | ---- |
| Monom. | apt M_ext1 | ---- |
| Monom. | apt C_lec1 | ---- |
| Polyphenic | F_exs1 | ---- |
| Polyphenic | N_lug1 | --TS |
| Monom. | mac D_mell | STTA |
| Monom. | mac D_sim1 | STTA |