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 MK IKEIIRQMNDSDLQAKLKDLKVELFNLR MKASEFRNLTSAEIEQKVAGFKEELFNLR

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 MKVKELRGLDRDRLVEELRKGKEELFKLR MKAKERRODSENNKLVGKELFNLR
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| UniRef90-H0UL96 |  | R |
| UniRef90-Q2N: | EAPARIREVRRS |  |
| B9 | EKSSRINEVR |  |
| UniRef90-R7G542 | TNTARAKKTVKKT |  |
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| UniRef90-F3YW | NTQR |  |
| UniRef90-UP1000366A1CF | NPMR |  |
| UniRefor R5H5Y | TNTAK:KKLKK | N |
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| UniRet90_D7CJL5 | DNPMRIREVK |  |
| UniRef90-D9QGLO UniRef90 R9PR03 | T HL | VSTLLREKRS |
| UniRef90- पplooo | ANTARCRQVRRD |  |
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| UniRef90-UPIOOO: | M | V |
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| UniRet90_C8XCH3 | DNNRRLRT |  |
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| UniRef90-A3JN31 | ENTARMK | RV |
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| UniRef90-UP10003820 | Mr ${ }^{\text {a }}$ RRD |  |
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| UniRef90 M1 N4 | EGTARVKKVRRD | ARVKTFLRQKMN |
| UniRet90＿U2U418 | D |  |
| UniRef90－A7X5F？ |  | A R |
| UniRef90－A6W384 | AQTHLLSQV | A |
| 4 E | ПNPMR！ |  |
| A0Y | GQTHL | RV |
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| UniRef90－M1YYH8 | ENPGRMKHMRRD | R ${ }_{\text {R }}$ |
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| UniRef90－A4FWB5 | SNPGK\｜SElKRT | A R |
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| UniRef90－UPIO004635FD3 | EKTA |  |
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| UniRef90－L1NR67 | KSSELKKT | ARIIKTVLAEKG |
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| UniRef90－Koz503 | ADNGRVRALR |  |
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| UniRef90－KOCEMO | SQTHQLGTVRRD | A R |
| UniRer90－R4VHB8 |  | A R |
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| UniRet90＿L5MGZ8 | SKLISKI QVVR | 相 |
| UniRef90－F9VLY9 | S |  |
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| UniRef90－K9RB19 | EKPAQFKHL | LAQLMTVEGERK |
| ee90 K4MD53 |  |  |
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| UniRef90-K2DZ24 | TNTSELRKVRRDI ARVKTILKEKG |
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 KATHEMKKVRRNI ARVKTVLTQKA EQTHRDKEIKKEIARI QLVIAEKAK ENTKALSGAKKTIARILTI QRER VNTAQI NNTRKGIARIRTILTEKA ENTAGI SKTKKGI AQAKTVINEKGS NKLSKIKGDRKSIARVLTVYNQ ENTAKLDEVKKTI ARVKKTVQAEDNK DKTHLVRQVRRAI AKI KTIMTEKA EKPHEFKHTRHRLAQLKTVERER SRPSQMKAVRRDI ARVKTVMNE EDTSLLKKLRKDIARLRTITREKTN EETANI RKVKKTI ARLKT
NK LDS K I KVVRKSIARVLTVYKQ
EKPHQFKHLKHRIAQLMTVERER
YKS SEFRRIHKNI ARMLTVKRER
ENTARLQTVRKAIARIKTLLRQ
GKTHEVQLARKAI ARI KTLLTEK
NKTADLGKLRRDIARVKTIMREKA
KSSDFKLMRKKVARMLTVKRER
ENTARDRQTRKTISRVKTLLRE
EKPVELK L L R R DVARMKTILKER
TRLAKI IQVRKGI ARVLTVYNQR
ENAMKLKSIKKEIAII KTI LREKSK
SKLSKI RIVVRKNIARILTVINQ
EDSSQI K KAKKDIARIIKTILNERA
ENPMKI RHTRRDI ARLKTILRQK
ENTAKIKETKREIARIMTVQYE

KNSEFSRMRKRIARMLTVKRER
VNHREI RRVKREI A RLKTVIRER
VNHRELPRVKNDIARILTVMRER
QNTASLRQTRRDI ARVRTILTEKA
TNSARI TTVRRTI AKI LTFI NQKKK
EQTHRIKEIKREI ARIELTLTER
TNHRELPKVKRDI ARMRTILRER
NKTSELGKLRREI ARVKTVIAEKG
ASPGTMHSIKKQI ARILTVMEEKRE
AKTHEARRVRREIARANTLLGEKK
SDFSK $\quad$ RAMRRTYARDQTVISEK
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QNTAA LRQTRRDIARAKTILAEKK
AKLCKI RVVRKTI ARTLTVINQ
D NPAQ:KVKRRDVARILTVLRQR

DKTHSDNEVKKNIARVLTALNQK
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EKPSRLDEELRKLI ARVETLLRE


SKLAKI GTVRKA A AVVLTVFNQ
ENPMVI RNLRRDI ARLLTIKREK
NKDSK】KVVRDNI A QVLTVDS Q
KTPHEFKHTKHWVAQLLTVQGERA
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DKPHEFKHLKHRISQLLTVERER
TQSNLVHDVRKKI ARVVKFM
EQTHQ RQARRDVARUKT LLSQ

EGFHQFKHARRKLAQLMTI ERER

EHPHRFKESR $\mathrm{E}_{\mathrm{K}} \mathrm{L}$ AHLLTTVQKERQS

ENPHEFKHARHRLAQLLTVERER
TSTSKliKDVKRRIARMLTLLAEK ENPQKIKQI RREI AQUIKTVLRE

ENPGHI RELRRTIARLMTEKNRRS
EKTSRIKEVRRDIARVKTLIR
DQSHKIA DI KKD:ARILTALK
VKPHQFKHLRHELAQLLLTLENER


EKPHRIGELKNQIARALT LSARKN
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EQSHLLSSSHKRTIARMLTVLQEK
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| UniRef90_Q11180 UniRef90_R7PB30 | NPAQIKAARRNIARN |
|  | NTPSELKKNRKTAARVKT |
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| UniRef90_Q1LTD0 | K |
| UniRef90-R5NAL3 | KPSRIREL |
| Unil | VRRV |
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| UniRef90-W6AAW5 | QTHRISY |
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| UniRef90-R5HHP1 |  |
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| UniR |  |
| UniRef90-A0AO23BRN8 | R K V |
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| UniRef90-C3PP99 | KNTSRFSLVKKSIARIKTELTKRAN |
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|  | AQTHLIKNVRRDIARVKT |
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| UniRef90-O6MJ22 | SNPVQTRGLRRDIAKINTAIVKK |
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| UniRef90-H0ACA8 |  |
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| UniRef90-UPIOO03B41A7D | ER |
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| UniRef90-F8WVT2 |  |
| UniRef90-UP100047 | D |
| UniRef90-UP100037A7152 | ENPL |
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| UniRef90-F9Q3G3 |  |
| UniRef90-F9ZGV6 |  |
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| UniRef90-A6Q116 |  |
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| UniRef90-UP1000248E6B6 |  |
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| JT |  |
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| UiRef90-V8CPC8 |  |
| UniRef9-ALVE4 |  |
| niRef90-_011111 |  |
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| UniRef90-K41RA9 |  |
| UniRef90 EOWOH9 | KQPDLFKKVRREDARVKTL |
| UniRef90 UPIO003680B0C | EGLKKYRGLRKDRARLLTVLVSEKKS |
| UniRef90 A8MDC2 | DNPGRMRYVRR |
| UniRef90-FORJU6 | PQPHRVSQLRREVAQLIN |
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| UniRef90-A1AVV | DDASKLGK |
| UniRef90 V5ADC | T NTASMS |
| UniRef90-FOQR | KNTSLIKLIKRTIAQ A L L L HERKE |
| UniRet90-A1QZS2 | ENPLKKRELRRD |
| UniRef90-F4G105 | KNTSSMRNIRKDIA |
| UniRef90-LOICJ7 | EDPGRINELGKT |
| UniRef90-TO) | GHLLVKEKRN |
| M5WCz8 | SEFRRMRKRI ARLL |
| UniRet90-K9SQM4 | FKPSDFGFAKHRLSQL |
| UniRef90-K1WS71 | SKLTKMHDLRKS |
| UniRef90-С8СМ36 | SKLSMIRTVRKNIARIFFT |
| UniRet90-A0CMG6 | QKLGRI GLVRKRI AKYLTVIN |
| UniRef90-O5234 | KTHIKETRQTLARVL |
| UniRef90-L1LF98 |  |
| UniRef90-E4TXG | TSELR |
| UniRef90_UPIO004 | SNTNQLRNVRRDI ARAKTILSQKAK |
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| UniRet90-UP10003B756AB | NHRVRET |
| UniRet90-UPIO002627FA0 | EDTSVIKKNRRDIARLKTLISERK |
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| UniRef90-C1LQW8 | GKLKK心RTLRKS:AR |
| UniRef90-B1ZNE0 | EKTHELRSLRR |
| UniRef90 B6BLS2 | NNTSELRVAKKDIAKINTALN |
| UniRef90-Q7VGD6 | TNPSEIKVIRKDIARINTAL |
| UniRef90_UPI000346 | VQPHMFKHAKHKLAQLMTVERSR |
| UniRef90 UP10003 | A |
| UniRet90_UP100001D0000 |  |
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| UniRef9-uploou403, | N ${ }^{\text {a }}$ |
| UniRe90_L9L6R7 |  |
| UniRet90_UPIo0046FA004 | P S |
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| UniRef90-F4GL74 | DNPLALRTTRRQ |
| UniRef90-C6W1x8 | ENPLR RASRKEARLLTELSAKSN |
| LOD6R0 | PSETKAKRE |
| UniRef90-D31K02 | kSARRDA ${ }^{\text {a }}$ |
| K1M3Q2 |  |
| J9H1 |  |
| 1A8 | DNPAKAKLLRKQ! ARILTIKNEEK |
| UniRet90-TolOH3 | DNPMR PAVKKT A |
| UniRer90-UP1000386237B | R GA |
| 析 | A |
| UniRef90-D8R514 | YKNMKKKIA |
| Uni |  |
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| UniRef90-AGMWO | F |
| UP100034BDA8A | ENPMKIRDSRKLIARLNTELRAK |
| UP1000368CD70 |  |
| iRef90_H8XSH6 | A P PLQLRSLIREVARVATELSKR |
| Ref90_12GQS1 |  |
| Uni | KQPhLlRKVRRNIAQVKTLLDSKEE |
| UniRef90 ${ }^{\text {UniRh}}$ | VKPHQFKHLRHQLAQLMTL |
| Unireta - ${ }^{\text {a }}$ |  |
| UniRef90-E4 ${ }^{\text {a }}$ |  |
| Ref90-14B7E0 | NARVGTLKKD |
| UniRef90-K0P016 | EHPMK RAAKKS ARLKTAQN |
| UniRef90-R5AVF5 | DNPAK1TADRRMIARV |
| UniRef90-C3XK34 | A R |
| UniRet90-R5S873 | A ${ }^{\text {a }}$ |
| UniRef90-R6PZ45 |  |
| UniRef90-Q73PM4 | DNPLEKRSMRRE\AMLNTF IRQK |
| iRet90_UP100035 |  |
| UniRet90-A6QCQ6 | RVAKK |
|  | D |
| UniRef90-R5PT58 | ADTSVIKKTRRDIA |
| UniRef90-R5BN79 | ED |
| UniRef90-13C875 | E |
| UniRef90-_8R3T2 | QAPTESKAKKS AR |
| UniRe990_R7JKE4 | ENPAQ1KQQRRM ARM |
| iRef90_G00XW7 |  |
| UniRef90_G01 |  |
| UniRef90-S2 | ENPNKLKESKRLIARL |
| UniRet90 |  |
| UniRee90 ${ }^{\text {a }}$ | DNPKKLADVKHDAR A M A R M |
| UniRei90 ${ }^{\circ}$ D8EWN3 | GNTAMI QKTKKDLARVKT |
| UniRef90 ${ }^{-}$X1FQ39 | QNPSQIQEYKKA |
| ef90 |  |

 MKTHELKNRSSEQLNQELIDLLKVQFGLRMMHATGQL


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 MLLASELKNKSAEELKKQLSELLEQQFKLK YQLRAGTI


AKKEKELSYPELIVKRNELKKKYMDLR

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MELKKMREMTAVELNTELANMKKEYMFNLR



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DKSHNGSNDKKD\|AR\|LTVLSERKN
FKSHDTKHTKHRLAQLKTLLT
ENPKVIRNHKKRIA QALLTVLREK
EKTHEFKHTRHRLGQLLTVERER SKLSK R VVVKSI A RVLTVIU Q SNPGKVKELKRTVARIKTIMNEKK ENPMRI RQSRRLI A QLMMELLNAR
ENT
$R K \square S K \square R A V R K S \square A R V L T V I N$ SKLS
NETNQLT LVRKRTAK TKTLMNE
DNPLQKRTMRRE IARLNTFDRQK
ENPVK
FKPHEDKKAKRRLA QLKT LDTSR

DNPAQIKLTRRMI ARMKGELRQR
QNPMVFRNSRRDI A RMKHRLHQLDAS
KNHQEYKVVRRQI ARIKTMIKQRA
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ENPMTI RGLRRDIARDKTELKKK IRPKEI REARKNVARAMT IRTEK


F QPHLFKHSKHRLAQLLTTEKSRN GNTNRIKEVKRSI ARVLTIMREK ENSSRIGAVKKDI ARVSTILRMR VKSHLFSEYKKNVARSLTVKREKKE ENPMKLRESRKLVARLKTELRAK ENKMRIPQDKKDLARVKTIIREKK ENKMRI PQUKKKDLARUK EGTAR
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[^1]


[^0]:    lupas_21
    lupas-14
    lupas_28
    jnet
    conf
    sol25
    sol5
    jhmm
    jpssm

[^1]:    lupas_21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol0
    jhmm
    jpssm

