

Online Supporting Information S3. The sequences for the enzymes listed in [Online Supporting Information S1](#).

>hsa:10

MDIEAYFERIGYKNSRNKLDLETLDILEHQIRAVPFENLNMHCGQAMELGLEAIFDHIV
RRNRGGWCLQVNQLLYWALTTIGFQTTMLGGYFYIPPVNKYSTGMVHLLQVTDGRNYI
VDAGSGSSSQMWQPLELISGKDQPVPCIFCLTEERGIWYLDQIRREQYITNKEFLNSHL
LPKKKHQKIYLFTELEPTIEDFESMNTYLQTSPTSSFITTSFCSLQTPPEGVYCLVGFILT
YRKFNYKDNTDLVEFKTLTEEEVEEVLNRNIFKISLGRNLVPKPGDGSLLTI

>hsa:13

MGRKSLYLLIVGILIAYYIYTPLPDNVEEPWRMMWINAHLKTIQNLATFVELLGLHHFMD
SFKVVGSFDEVPPTSDENVTVTETKFNILVVRVYVPKRKSEALRRGLFYIHGGGWCVGS
ALSGYDLSRWTADRLDAVVVSTNYRLAPKYHFPIQFEDVYNALRWFLRKKVLAKYGVNP
ERIGISGDSAGGNLAAAVTQQLDDPDVKIKLKIQSLIYPALQPLDVLPSYQENSNFLF
LSKSLMVRWFSEYFTTDRSLEKAMLSRQHVPESSHLFKFVNWSLLPERFIKGVYNNP
NYGSSELAKKYPGLDVRAAPLLADDNKLRLPLTYVITCQYDLLRDDGLMYVTRLRNTG
VQVTHNHVEDGFHGAFSFLGLKISHRLINQYIEWLKENL

>hsa:18

MASMLLAQRLACSFQHSYRLLVPGSRHISQAAAKVDVEFDYDGPLMKTEVPGPRSQELMK
QLNIIQNAEAVHFFCNYYEESRGNLYLDVDGDRMLDLYSQISSVPIGYSHPALLKLIQPPQ
NASMFVNRPALGILPPENFVEKLRQSLLSVAPKGMSQLITMACGSCSNENALKTIFMWYR
SKERGQRGFSQEELETCMINQAPGCPDYSILSFMGAFHGRTMGCLATTHSKAIHKIDIPS
FDWPIAPFRLKYPLEEFVKENQEEARCLEEVEDLIVKYRKKKKTVAGIIVEPIQSEGG
DNHASDDFFRKLRLDIARKHGCAFLVDEVQTTGGGCTGKFWAHEHWGLDDPADVMTFSKMM
TGGFFHKEEFRPNAPYRIFNTWLGDPSKNLLLAEVINI IKREDLLNNAAHAGKALLTGLL
DLQARYPQFISRVGRGTFCSDTPDDESIRNKLILIARNKGVVLGGCGDKSIRFRPTLVF
RDHHAHLFLNIFSDILADFK

>hsa:100

MAQTPAFDKPKVELHVHLDGSIKPETILYYGRRRGIALPANTAEGLLNVIGMDKPLTLPD
FLAKFDYYPPIAGCREAIKRIAYEFVEMKAKEGVVYVEVRYSPELLANSKVEPIIPWQA
EGDLTPDEVALVGQLOEGERDFGVKARSILCCMRHQPNWSPKVVVELCKKYQQQTVVAI
DLAGDETIPGSSLLPGHVQAYQEAVKSGIHRTVHAGEVGSAEVVKEAVDILKTERLGHGY
HTLEDQALYNRLRQENMHFEICPWSSYLTAWKPDTEHAVIRLKNQANYSLNTDDPLIF
KSTLDTDYQMTKRDMGFTEEEFKRLNINAAKSSFLPEDEKRELLDILLYKAYGMPPSASAG
QNL

>hsa:10056

MPTVSVKRDLLFQALGRTYTDEEFDELCEFEGLLEDEITSEKEIISKEQGNVKAAGASDV
VLYKIDVPANRYDLLCLEGLVRGLQVFKERIKAPVYKRVMPDGKIQKLIITEETAKIRPF
AVAAVLRNIKFTKDRYDSFIELQEKLHQNICRKRALVAIGTHDLDTLSGPFTYTAKRPSD
IKFKPLNKTKEYTACELMNIYKTDNHLKHYLHIENKPLYPVIYDSNGVVLSPPIINGD
HSRITVNRNIFIECTGTDFTKAKIVLDIIVTMFSEYCNQFTVEAAEVVFPNGKSHTFP
ELAYRKEMVRADLINKKVGIRETPENLAKLLTRMYLKSEVIGDGNQIEIEIPPTRADIIH
ACDIVEDAAIAYGYNNIQMTLPKTYTIANQFPLNKLTELLRHDMAAAGFTEALTFALCSQ
EDIADKLGVDISATKAVHISNPKTAEFQVARTTLLPGLLKTIAANRKMPLPLKLFESDI

VIKDSNTDVGAKNYRHLCAVYYNKNPGFEIIHGLLDRIMQLLDVPPGEDKGGYVIKASEG
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>hsa:10188

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TCLIGEKDLRLEKLDGSGFVVRGGEWDAPSGKTVSVAVKCLKPDVLSQPEAMDDFIRE
VNAMEHSLDHRNLRIRLYGVVLTTPMKMVELAPLGSLLDRLRKHQGHFLLGTLSTRYAVQVA
EGMGYLESKRFIHRDLAARNLLLATRDLVKIGDFGLMRALPQNDHYVMQEHKVPFAWC
APESLKRTRTFSHASDTWMFGVTLWEMFTYQEPWIGLNGSQILHKIDKEGERLPRPEDCP
QDIYNVMVQCWAHKPEDRPTFVALRDFLLEAQPTDMRALQDFEEDKLHIQMNVDITVIE
GRAENYWWRGQNTRTL CVGPFPRNVVTSVAGLSAQDISQPLQNSFIHTGHGSDSPRHCWG
FPDRIDELYLGNPMDPPDLLSVELSTSRPPQHLGGVKREPPPRPPQPAFFTQKPTYDPVS
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DDFEICINSTLVGAGVPAGPSQGQTNAYFVPEQARPPPLEDNFLPPOGGGKPPSSAQ
TAEIFQALQOECMRQLOAPAGSPAPSPSPGGDDKQVPPRVPIPPRPTRPHVQLSPAPP
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PAHHR

>hsa:10269

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TQSLVFLLLATLFSALTGLPWSLYNTFVIEEKHGFNQOTLGFMMKDAIKKFVVTQCILLP
VSSLLLYIIKIGGDYFFIYAWLFTLVVSLVLTIIYADYIAPLFDKFTPLPEGKLEIEV
MAKSIDFPLTKVYVVEGSKRSSHSNAYFYGFKNKRIVLFDTLLEEYSVLNKDIQEDSGM
EPRNEEEGNSEEIKAKVKNKKQGCKNEEVLAVLGHELGHWKLGHTVKNIIISOMNSFLCF
FLFAVLIGRKELFAAFGFYDSQPTLIGLLIIFQFIFSPYNEVLSFCLTVLSRRFEFQADA
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>hsa:10279

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AWGALVISLEHRFYGLSIPAGGLEMAQLRFLSSRLALADVVSARLALSRLFNISSSSPWI
CFGGSYAGSLAAWARLKFPHLIFASVASSAPVRAVLDFSEYNDVVSRLMSTAIGGSLEC
RAAVSVAFAEVERRLRSGGAAQAALRTELSACGPLGRAENQAELLGALQALVGGVVQYDG
QTGAPLSVRQLCGLLLGGGNRSHSTPYCGLRRAVQIVLHSLGQKCLSFSRAETVAQLRS
TEPQLSGVDRQWLYQCTEFYVTCENPRCPFSQLPALPSQLDLCEQVFGLSALSVAQ
AVAQTNSSYGGQTPGANKVLFVNGDTPWHVLSVTQALGSSSESTLLIRTGSHCLDMAPER
PSDSPSLRGRQNIQOLOTWLKLAKESQIKGEV

>hsa:10295

MILASVLRSGPGGLPLRPLLPALALRARSTSATDTHHVEMARERSKTVTSFYNQSAID
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TILHVHELYIRAFQKLTDFPP IKDQADEAQYCOLVRQLLDDHKDVVTLAEGLRRESRKHI
 EDEKLVRYFLDKTLTSRLGIRMLATHHLALHEDKPDFVGI ICTRLSPKKI IEKWVDFARR
 LCEHKYGNAPRVRINGHVAARFFP I MPLDY ILPELLKNAMRATMESHLDTPYNVPDVVI
 TIANNVDVLI IIRISDRGGGIAHKDLDRVMDYHFTTAEASTQDPRI S PLFGHLDMHSGAQS
 GPMHG

>hsa:10327

MAASCVLLHTGQKMPLIGLGTWKSEPGQVKA AVKYALSVGYRHIDCAA IYGNPEI GEAL
 KEDVGP GKAVPREELFVTSKLWNTKHHPEDEV PALRKT LADLQLEYLDLYLMHWPYAFER
 GDNPF PKNADGTICYDSTHYKETWKALEALVAKGLVQALGLSNFNSRQID DILSVASVRP
 AVLQVECHPYLAQNELIAHCQARGLEVTAYSPLGSSDRAW RDPDEPVLLEEPVVLALAEK
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 PMLTVDGKRVRPRDAGHPLYPFNDPY

>hsa:1033

MKPPSSIQTSCFKDVR RNVOKDTEELKSCGIQDIFVFC TRGELSKYRVPNLLDLYQOCG
 IITHHPIADGGTPDIASCCEIMEELT TCLKNYRKT LIHCYGLGRSCLVAACLLLYLSD
 TISPEQAIDSLRDLRGSGAIQT IKQYNYLHEFRDKLAAHLSSRDSQSRSVSR

>hsa:10461

MGPAPLPLLLGLFLPALWRRAIT EAREEAKPYPLFP GPFPGLQTDHTPLLSLPHASGYQ
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 NIYQDTTISWWDGKELLGAHHAITQFY PDDEVTAI IASFSITSVQRSDNGSYICKMKIN
 NEEIVSDPIYIEVQGLPHFTKQPE SMNVT RNTAFNLTCQAVGPPEPVNIFWVQNSSRVNE
 QPEKSPSVLTVPGLTEMAVFSCEAHNDKGLTVSKGVQINIKAI P SPPTEV SIRNSTAHSI
 LISWVPGFDGYS PFRNC SIQVKEADPLSNGSVMIFNTSALPHLYQIKQLQALANYSIGVS
 CMNEIGWSAVSPWILASTTEGAPSVAPLNVTVFLNESSDNVDIRW MKPPTKQODGELVGY
 RISHVWQSAGISKELLEEVGQNGSRARISVQVHNATCTVRIAAVTRGGVGPFS DPVKIFI
 PAHGWDYAPSSTPAPGNADPVL IIFGCFCGFILIGLILYISLAIRKRVQETKFGNAFTE
 EDSELVVNYIAKKSFCRRAIELTLHSLGVSEELQNKLEDVVIDR NLLILGKILGEGEFGS
 VMEGNLKQEDGTS LKVAVKTMKLDNSSQREIEEFLSEAACMKDF SHPNVIRLLGVCIEMS
 SOGIPKPMVILPFM KYGDLHTYLLYSRLETGPKHIPLQ TLLKFMVDIALGMEYLSNRNFL
 HRDLAARNCMLRDDMTVCVADFGLSKKIYSGDYRQGR IAKMPVKWIAIESLADR VYTSK
 SDVWAFGVTMWEIATRGMTPYPGVQNH EMYDYLLHGHRLKQPEDCLDELYEIMYSCWR TD
 PLDRPTFSVLRRLQLEKLLLES LPDVRNQADVIYVNTQLLESSEGLAQGSTLAPLDLNIDPD
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 RLVRNGVSWSHSSMLPLGSSLPDELLFADDSSEGSEVLM

>hsa:10549

MEALPLLAATTPDHGRHRRL LLLPLLLFLLPAGAVQGWETE ERPRTREEECHFYAGGQVY
 PGEASRVSVADHSLHLSKAKISK P APYWEGTAVIDGEFKELKLT DYRGKYL VFFFYPLDF
 TFVCPTEIIAFGDRLEEFRSINTEV VACSVDSQFTHLAWINTPRRQGLGPIRIPLLSDL
 THQISKDYGVYLED SGHTLRGLFIIDDKGILRQITLNDLPVGRSVDETLRLVQAFQYTDK
 HGEVCPAGWKPGSETIIPDPAGK LKYFDKLN

>hsa:1056

MLTMGRLQLVVLGLTCCWAVASAAKLGAVYTEGGFVEGVNKKLGLLGDSVDIFKGI PFAA
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 LPVMIWIYGGAFLMGSGHGANFLNNYLYDGEEIATRGNVIVVTFNYRVGPLGFLSTGDAN

LPGNYGLRDQHMAIAWVKRNIAAFGGDPNNITLFGESAGGASVSLQTLSPYNKGLIRRAI
 SQSGVALSPWVIQKNPLFWAKKVAEKVGCVPVGDAAARMAQCLKVTDPRALTLAYKVPLAGL
 EYPMLHYVGFVVIDGDFIPADPINLYANAADIDYIAGTNNMDGHI FASIDMPAINKGNK
 KVTEEDFYKLVSEFTITKGLRGAKTTFDVYTESWAQDPSQENKKKTVVDFETDVLFLVPT
 EIALAQHRANAKSAKTYAYLFSHPSRMPVYPKWVGADHADDIQYVFGKPFATPTGYRPQD
 RTVSKAMIAYWTNFAKTGDPNMGDSAVPTHWEPTYTTENSGYLEITKKMGSSSMKRSLRTN
 FLRYWTLTYLALPTVTDQEATPVPPTGDSEATPVPPTGDSETAPVPPTGDSGAPPVPPTG
 DSGAPPVPPTGDSGAPPVPPTGDSGAPPVPPTGDSGAPPVPPTGDSGAPPVPPTGDSGAP
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 GDSGAPPVPPTGDSEAAPVPPTDDSKEAQMPAVIRF

>hsa:10667

MVGSALRRGAHAYVYLVSKASHISRGHQHQAWGSRPPAAECATQORAPGSVVELLKGKSYPO
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 TTWQNFDSLLIPADHPSRKKGDNYLNRTHMLRAHTSAHQWDLHAGLDAFLVVGDVYRR
 DQIDSQHYPIFHQLEAVRLFSEKHELFAGIKDGESLQLFEQSSRSAHKQETHTMEAVKLVE
 FDLKQTLTRLMAHLFGDELEIRWVDCYFPFTHPSFEMEINFHGEWLEVLGCGVMEQQLVN
 SAGAQRIGWAFGLGLERLAMILYDIPDIRLFWCEDERFLKQFCVSNINQKVKFQPLSKY
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 MERTLSQREVRHIHQALQEAQVQLLGVVEGRF

>hsa:107

MAGAPRGGGGGGGAGEPGGAERAAGTSRRRGLRACDEEFACPELEALFRGYTLRLEQAA
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 QVGQLALLFSLTFALLCCPFALGGPARGSAGAAGGPATAEQGVWQLLLVTFVSYALLPVR
 SLLAIGFGLVVAASHLLVTATLVPKRPRRLWRTLGANALLFVGVNMYGVFVRILTERSQR
 KAFLOARSCIEDRLRLEDENEKQERLLMSLLPRNVAMEMKEDFLKPPERIFHKIYIQRHD
 NVSILFADIVGFTGLASQCTAQELVKLLNELFGKFDELATENHCRIKILGDCYYCVSGL
 TQPKTDHAHCCVEMGLDMIDTITSVAEATEVDLNMVRVGLHTGRVLCGVLGLRKKWQYDVWS
 NDVTLANVMEAAGLPGKVHITKTTLACLNGDYEVPEPGYGHENRNSFLKTHNIETFFIVPSH
 RRKIFPGLILSDIKPAKRMKFKTVCYLLVQLMHCRCMKFAEIPFSNVMTCEDDDKRRALR
 TASEKLRNRSSFSTNVVYTPGTRVNRYSRLLRQTELEMADLNFFTLKYKHVEREQK
 YHQLODEYFTSAVVLTLILAALFGLVYLLIFPQSVVVLVLLVFCICFLVACVLYLHITRV
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 SGRSYEPIVAILLFSCALALHARQVDIRLRDLWAAQAEEREDMEKVKLDNRRILFNL
 LPAHVAQHFLMSNPRNMDLYYQSYSQVGMFASIPNFNDFYIELDGNNMGVECLRLLNEI
 IADFDELMEKDFYKDIEKIKTIGSTYMAAVGLAPTSGTKAKKISSHLSTLADFAIEMFD
 VLDEINYQSYNDFVLRVGINVGPVAVGIGARRPQYDIWGNTVNVASRMDSTGVQGRIOV
 TEEVHRLRLRCPYHFVCRGKVSVKGKGEMLTYFLEGRTDGNGSQIRSLGLDRKMCPPFGRA
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>hsa:10720

MTLKWTSVLLLIHLSYFSSGSCGKVLVWAAEYSHWMNMKTILKELVQRGHEVTVLASSA
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 DIFRNFCQDVVSNKKVMKKLQESRFDIVFADAVFPCGELLAALLNIRFVYSLRFTPGYTI
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GRPTTLFETMGKADIWLMRNSWSFQFPHFPLPNVDFVGGFHCKPAKPLPKEMEEFVQSSG
 ENGVVVFSLGSVISNMTAERANVIATALAKIPQKVLWRFDGNKPDALGLNTRLYKWIPQN
 DLLGHPKTRAFITHGGANGIYEAIYHGIPMVGIPLFFDQPDNIAHMKAKGAAVRLDFNTM
 SSTDLLNALKTVINDPLYKENIMKLSRIQHDQPVKPLDRAVFWIEFVMPHKGAKHLRVAA
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>hsa:10747

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 YSNEKPFTGF EAFYAAEDIDECQVAPGEAPTCDHHCHNHLGGFYCSCRAGYVLHRNKRTC
 SALCSGQVFTQRSSELSSPEYPRYPKLSSTYSISLEEGFSVILDFVESFDVETHPETL
 CPYDFLKIQT DREEHGPF CGKTLPHRIETKSNTVTITFVTDESGDHTGWKIHYTSTAQPC
 PYPMAPPNGHVSPVQAKYILKDSFSIFCETGYELLOGHLPLKSFTAVCQKDGSDWRPMPA
 CSI VDCGPPDDLPSGRVEYITGPGVTTYKAVIQYSCEETFYTMKVNDGKYVCEADGFWTS
 SKGEKSLPVCEPVCGLSARTTGGRIYGGQKAKPGDFPWQVLILGGTTAAGALLYDNWVLT
 AAHAVYEQKH DASALDIRMGT LKRLSPHYTQAWSEAVFIHEGYTHDAGFDNDIALIKLNN
 KVVINSNITPICLPRKEAESFMRTDDIGTASGWGLTQRGFLARNLMYVDIPIVDHQKCTA
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>hsa:108

MWQ EAMRRRRLRDRSEEAAGGDGLPRSRDWLYESYYCMSQQHPLIVFLLLIVMGSCLA
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 PGGKEHLVWQILANVIFICGNLAGAYHKHLMELALQQTYQDTCNCIKSRIKLEFEKRQQ
 ERLLLSLLPAHIAMEMKAEIIQRLOGPKAGQMENTNMFHNLYVKRHTNVSILYADIVGFT
 RLASDCSPGELVHMLNELFGKFDQIAKENECMRIKILGDCYCVSGLPISLPNHAKNCVK
 MGLDMCEAIKKVRDATGVDINMRVGVHSGNVLCGVIGLQKWQYDVWSDVTLANHMEAGG
 VPGRVHISSVTLEHLNGAYKVEEGDGDIRDYPLKQHLVKTYFVINPKGERRSPQHLFRPR
 HTLDGAKMRASVRMTRYLESWGAAKPFALHHRDSMTTENGKISTTDVPMGQHNFNQRTL
 RTKSQKKRFEEELNERMIOAIDGINAQKQWLKSEDIQRISLLFYNKVLEKEYRATALPAF
 KYYVTCACLIFFCIFIVQILVLPKTSVLGISFGAAFLLLAFILFVCFAGQLLQCSKKASP
 LLMWLLKSSGIIANRPWRISLTIITTAIILMMAVFNMFLLSDSEETIPPTANTTNTSFS
 ASNQVAILRAQNLFFLPYFIYSCILGLISCVFLRVNYELKMLIMMVALVGYNLILHT
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 EREEIETMENLNRVLENLVPAHVAEHFLARSLKNEELYHQS YDCVCMFASIPDFKEYY
 TESDVNKEGLECLRLLNEIIADFDDLLSKPKFSGVEKIKTIGSTYMAATGLSAVPSQEHS
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 SRSLSQSNVAS

>hsa:10825

MRPADLPPRPMEESPASSAPTETEEPGSSAEVMEEVTTCSFN SPLFRQEDDRGITYRIP
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 NPCPVWEQKSGCVLFFICVRGHVTERQQIVSGRNAARLCFIYSQDAGCSWSEVRDLTEE
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>hsa:10846

MEDGPSNNASCFRRLTECFSLSPSLTDEKVKAYLSLHPQVLDEFVSESVSAETVEKWLKRR
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 SVAIHQVQVCRGLAKQTELNDFLLDVSKTYFDNIVAIDSLEHIMIYAKNLVNADRCALF
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 RFNREVDLYTGYTTRNILCMPIVSRGSVIGVQMVNKGSGSAFSKTDENNFKMFAVFCAL
 ALHCANMYHRIRHSECIYRVTMKLSYHSICTSEEWQGLMQFTLPVRLCKEIELFHFDIG
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 SILQLEGHNIFSTLSSSEYEQVLEIIRKAI IATDLALYFGNRKQLEEMYQTGSLNLNQNS
 HRDRVIGLMMTACDLCVTKLWPVTKLTANDIYAEFWAEGDEMKKLGIQPIPMMDRDKK
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 AQKAAASED

>hsa:10858

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 FGQGLVSECNYERWHKQRRVIDLAFSRSSLVSLMETFNEKAEQLVEILEAKADGQTPVSM
 QDMLTYTAMDILAKAAFQMETSMMLGAQKPLSQAVKLMLEGITASRNTLAKFLPGKRKQL
 REVRESIRFLRQVGRDWWQRRREALKRGEVVPADILTQILKAEEGAQDDEGLLDNFVTF
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 LRLYPPAWGTFRLLLEEETLIDGVRVPGNTPLLFSTYVMGRMDTYFEDPLTFNPDRFGPGA
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>hsa:109

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 L FVLCKKGLLPDRVTRRVLPYVLWLLITAQIFSYLGLNFARAHASDTVGVQVFFVFSFF
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 QKDQQQFNTMYMYRHENVSILFADIVGFTQLSSACSAQELVKLLNELFARFDKLA AKYHQ
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>hsa:10901

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>hsa:10924

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>hsa:10935

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>hsa:10941

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>hsa:11072

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>hsa:111

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>hsa:112

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>hsa:11202

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>hsa:11221

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>hsa:11238

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>hsa:11266

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>hsa:113

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>hsa:11330

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>hsa:11343

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>hsa:114

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>hsa:1147

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>hsa:115

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>hsa:116447

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>hsa:1178

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>hsa:1200

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>hsa:1215

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>hsa:124

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>hsa:125

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>hsa:126

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>hsa:1267

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>hsa:128

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>hsa:128853

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>hsa:129807

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>hsa:130399

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>hsa:131

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>hsa:1312

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>hsa:132

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>hsa:132160

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>hsa:133121

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>hsa:134510

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>hsa:1360

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>hsa:1363

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>hsa:1374

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>hsa:1376

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>hsa:1384

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>hsa:142679

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>hsa:1429

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>hsa:1431

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>hsa:1432

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>hsa:1436

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>hsa:1445

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>hsa:150290

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>hsa:1504

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>hsa:151531

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>hsa:1537

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>hsa:1543

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>hsa:1544

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>hsa:1545

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>hsa:1548

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>hsa:1549

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>hsa:1551

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>hsa:1553

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>hsa:1555

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>hsa:1557

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>hsa:1558

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>hsa:1559

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>hsa:1562

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>hsa:1565

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>hsa:1571

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>hsa:1572

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>hsa:1573

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>hsa:1576

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>hsa:1577

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>hsa:1579

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>hsa:1580

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>hsa:1581

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>hsa:1582

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>hsa:1583

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>hsa:1584

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>hsa:1585

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>hsa:1586

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>hsa:1588

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>hsa:1589

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>hsa:1593

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>hsa:1594

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>hsa:1595

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>hsa:1610

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>hsa:1621

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>hsa:1633

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>hsa:1636

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>hsa:1645

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>hsa:1675

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>hsa:1719

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>hsa:1723

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>hsa:1725

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>hsa:1728

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>hsa:1800

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>hsa:1803

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>hsa:1806

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>hsa:1843

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>hsa:1844

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>hsa:1845

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>hsa:1846

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>hsa:1847

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>hsa:1848

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>hsa:1849

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>hsa:1850

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>hsa:1852

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>hsa:189

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>hsa:1890

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>hsa:191

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>hsa:1956

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>hsa:196883

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>hsa:1969

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>hsa:1990

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>hsa:1991

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>hsa:199974

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>hsa:2041

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>hsa:2042

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>hsa:2043

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>hsa:2044

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>hsa:2045

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>hsa:2046

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>hsa:2047

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>hsa:2048

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>hsa:2049

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>hsa:2050

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>hsa:2051

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>hsa:2058

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>hsa:2064

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>hsa:2065

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>hsa:2066

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>hsa:2098

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>hsa:2135

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>hsa:2147

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>hsa:2155

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>hsa:2158

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>hsa:2159

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>hsa:216

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>hsa:2160

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>hsa:2161

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>hsa:217

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>hsa:218

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>hsa:2180

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>hsa:2185

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>hsa:219

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>hsa:2193

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>hsa:2224

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>hsa:223

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>hsa:2232

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>hsa:2235

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>hsa:224

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>hsa:2241

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>hsa:2242

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>hsa:225689

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>hsa:2260

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>hsa:2261

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>hsa:2263

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>hsa:2264

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>hsa:2280

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>hsa:22843

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>hsa:22954

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>hsa:22978

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>hsa:23035

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>hsa:231

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>hsa:2321

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>hsa:2322

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>hsa:23236

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>hsa:2326

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>hsa:25

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>hsa:2534

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>hsa:2548

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>hsa:25796

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>hsa:2582

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>hsa:25824

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>hsa:2595

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>hsa:2597

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>hsa:260293

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>hsa:26279

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>hsa:2638

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>hsa:2639

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>hsa:2673

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>hsa:2677

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>hsa:270

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>hsa:27032

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>hsa:27034

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>hsa:27115

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>hsa:2746

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>hsa:2766

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>hsa:279

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>hsa:28

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>hsa:2806

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>hsa:2822

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>hsa:28227

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>hsa:284541

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>hsa:285220

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>hsa:2880

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>hsa:2882

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>hsa:28972

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>hsa:2936

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>hsa:2950

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>hsa:29785

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>hsa:29920

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>hsa:29941

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>hsa:29968

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>hsa:30

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>hsa:3001

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>hsa:3002

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>hsa:3028

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>hsa:3033

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>hsa:3034

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>hsa:3035

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>hsa:3055

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>hsa:306

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>hsa:3067

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>hsa:30814

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>hsa:30833

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>hsa:31

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>hsa:313

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>hsa:3141

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>hsa:3156

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>hsa:32

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>hsa:326625

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>hsa:327

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>hsa:3283

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>hsa:3290

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>hsa:3291

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>hsa:3292

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>hsa:3295

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>hsa:3376

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>hsa:339221

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>hsa:34

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>hsa:3480

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>hsa:349565

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>hsa:35

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>hsa:353

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>hsa:354

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>hsa:3551

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>hsa:3818

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>hsa:3906

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>hsa:390956 peptidyl-prolyl cis-trans isomerase A-like (A)

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>hsa:3932

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>hsa:3939

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>hsa:3945

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>hsa:3988

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>hsa:3990

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>hsa:3991

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>hsa:4017

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>hsa:4023

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>hsa:4025

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>hsa:4048

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>hsa:4051

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>hsa:4058

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>hsa:4067

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>hsa:4128

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>hsa:4129

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>hsa:4143

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>hsa:4145

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>hsa:4190

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>hsa:4191

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>hsa:4200

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>hsa:4233

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>hsa:4282

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>hsa:43

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>hsa:4311

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>hsa:4329

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>hsa:4353

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>hsa:444

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>hsa:4482

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>hsa:4486

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>hsa:4548

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>hsa:4552

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>hsa:4593

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>hsa:4758

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>hsa:4759

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>hsa:476

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>hsa:4835

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>hsa:4837

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>hsa:4860

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>hsa:4881

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>hsa:49

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>hsa:4907

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>hsa:4914

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>hsa:4915

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>hsa:4916

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>hsa:4919

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>hsa:4920

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>hsa:4921

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>hsa:4942

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>hsa:495

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>hsa:4953

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>hsa:50

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>hsa:501

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>hsa:5033

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>hsa:5045

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>hsa:50484

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>hsa:50487

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>hsa:5049

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>hsa:5050

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>hsa:5051

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>hsa:5052

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>hsa:5053

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>hsa:5091

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 K D F T A T F G P L D S L N T R L F L Q G P K I A E E F E V E L E R G K T L H I K A L A V S D L N R A G O R Q V F F E L
 N G Q L R S I L V K D T Q A M K E M H F H P K A L K D V K G Q I G A P M P G K V I D I K V V A G A K V A K G Q P L C V L
 S A M K M E T V V T S P M E G T V R K V H V T K D M T L E G D D L I L E I E

>hsa:50940

M S P K C S A D A E N S F K E S M E K S S Y S D W L I N N S I A E L V A S T G L P V N I S D A Y Q D P R F D A E A D Q I
 S G F H I R S V L C V P I W N S N H Q I I G V A Q V L N R L D G K P F D D A D Q R L F E A F V I F C G L G I N N T I M Y

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>hsa:5095

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>hsa:5096

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>hsa:51

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>hsa:51004

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>hsa:51095

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>hsa:51166

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>hsa:51172

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>hsa:51181

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>hsa:51205

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>hsa:51207

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>hsa:5122

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>hsa:51251

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>hsa:5126

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>hsa:51292

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>hsa:513

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>hsa:51302

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G P I F T V F A M G N R M T F V T E E E G I N V F L K S K K V D F E L A V Q N I V Y R T A S I P K N V F L A L H E K L Y
I M L K G K M G T V N L H Q F T G Q L T E E L H E Q L E N L G T H G T M D L N N L V R H L L Y P V T V N M L F N K S L F
S T N K K K I K E F H Q Y F Q V Y D E D F E Y G S Q L P E C L L R N W S K S K K W F L E L F E K N I P D I K A C K S A K
D N S M T L L Q A T L D I V E T E T S K E N S P N Y G L L L L W A S L S N A V P V A F W T L A Y V L S H P D I H K A I M
E G I S S V F G K A G K D K I K V S E D D L E N L L L I K W C V L E T I R L K A P G V I T R K V V K P V E I L N Y I I P
S G D L L M L S P F W L H R N P K Y F P E P E L F K P E R W K K A N L E K H S F L D C F M A F G S G K F Q C P A R W F A
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>hsa:5136

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>hsa:51365

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W I Y G S T G V Y F S A V K N V L G V S E S S I H I I G V S L G A H V G G M V G Q L F G G Q L G Q I T G L D P A G P E Y
T R A S V E E R L D A G D A L F V E A I H T D T D N L G I R I P V G H V D Y F V N G G Q D Q P G C P T F F Y A G Y S Y L
I C D H M R A V H L Y I S A L E N S C P L M A F P C A S Y K A F L A G R C L D C F N P F L L S C P R I G L V E Q G G V K
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>hsa:5137

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>hsa:5138

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>hsa:5140

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>hsa:5141

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>hsa:5142

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>hsa:5143

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>hsa:5144

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>hsa:5145

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>hsa:5146

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>hsa:5147

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>hsa:5148

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>hsa:5149

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>hsa:5150

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>hsa:5151

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>hsa:5152

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>hsa:5156

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>hsa:5158

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>hsa:5159

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>hsa:51645

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>hsa:5167

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>hsa:5168

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>hsa:5169

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>hsa:51727

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>hsa:52

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>hsa:5294

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>hsa:53

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>hsa:5319

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>hsa:5320

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>hsa:5321

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>hsa:5322

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>hsa:5327

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>hsa:5328

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>hsa:5330

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>hsa:5331

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>hsa:5332

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>hsa:5333

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>hsa:5335

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>hsa:5338

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>hsa:5351

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>hsa:5406

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>hsa:5407

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>hsa:5408

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>hsa:5422

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>hsa:5423

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>hsa:5444

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>hsa:5445

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>hsa:5447

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>hsa:54490

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>hsa:54575

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>hsa:54576

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>hsa:54577

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>hsa:54578

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>hsa:54579

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>hsa:54600

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>hsa:54657

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>hsa:54658

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>hsa:54659

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>hsa:54677

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>hsa:5470

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>hsa:5475

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>hsa:5476

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>hsa:5478

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>hsa:5479

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>hsa:5481

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>hsa:54878

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>hsa:5494

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>hsa:5495

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>hsa:5496

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>hsa:5499

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>hsa:55

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>hsa:5500

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>hsa:5501

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>hsa:5515

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>hsa:5516

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>hsa:5523

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>hsa:5530

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>hsa:5531

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>hsa:55312

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>hsa:5532

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>hsa:5533

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>hsa:55359

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>hsa:5536

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>hsa:5537

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>hsa:5538

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>hsa:5547

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>hsa:5550

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>hsa:55512

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>hsa:5562

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>hsa:55775

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>hsa:558

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>hsa:55811

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>hsa:55902

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>hsa:5594

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>hsa:5595

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>hsa:5596

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>hsa:5597

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>hsa:5598

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>hsa:5599

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>hsa:5600

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>hsa:5601

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>hsa:5602

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>hsa:5603

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>hsa:5604

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>hsa:5605

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>hsa:5606

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>hsa:5607

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>hsa:5608

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>hsa:5624

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>hsa:5625

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>hsa:5645

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>hsa:5646

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>hsa:5650

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>hsa:5651

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>hsa:5657

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>hsa:56922

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>hsa:57016

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>hsa:57176

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>hsa:5740

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>hsa:5742

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>hsa:5743

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>hsa:5747

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>hsa:5754

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>hsa:57665

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>hsa:58190

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>hsa:5831

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>hsa:5834

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>hsa:5836

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>hsa:5837

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>hsa:586

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>hsa:5860

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>hsa:587

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>hsa:590

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>hsa:5972

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>hsa:5979

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>hsa:6098

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>hsa:613

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>hsa:6240

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>hsa:6241

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>hsa:6259

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>hsa:6300

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>hsa:63036

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>hsa:635

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>hsa:63904

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>hsa:64087

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>hsa:6416

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>hsa:64499

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>hsa:645

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>hsa:64600

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>hsa:64802

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>hsa:64816

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>hsa:64850

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>hsa:64902

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>hsa:657

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>hsa:658

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>hsa:660

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>hsa:6609

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>hsa:6610

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>hsa:6646

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>hsa:6652

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>hsa:670

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>hsa:6713

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>hsa:6714

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>hsa:6716

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>hsa:6725

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>hsa:6768

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>hsa:6799

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>hsa:683

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>hsa:686

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>hsa:6897

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>hsa:6898

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>hsa:695

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>hsa:7010

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>hsa:7015

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>hsa:7046

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>hsa:7083

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>hsa:7155

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>hsa:7156

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>hsa:7172

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>hsa:7173

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>hsa:7174

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>hsa:7294

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>hsa:7297

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>hsa:7298

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>hsa:7299

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>hsa:7301

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>hsa:7363

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>hsa:7364

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>hsa:7365

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>hsa:7366

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>hsa:7367

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>hsa:7371

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>hsa:7372

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>hsa:7378

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>hsa:7453

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>hsa:7498

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>hsa:7525

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>hsa:7535

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>hsa:759

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>hsa:760

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>hsa:761

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>hsa:762

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>hsa:763

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>hsa:765

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>hsa:766

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>hsa:767

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>hsa:768

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>hsa:771

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>hsa:780

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>hsa:79001

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>hsa:7957

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>hsa:79799

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>hsa:80339

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>hsa:80824

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>hsa:81579

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>hsa:8192

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>hsa:8288

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>hsa:834

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>hsa:8398

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>hsa:8399

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>hsa:84152

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>hsa:84171

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>hsa:8435

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>hsa:84532

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>hsa:84618

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>hsa:84695

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>hsa:84706

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>hsa:84812

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>hsa:8513

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>hsa:8529

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>hsa:85313

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>hsa:8555

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>hsa:8556

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>hsa:8622

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>hsa:8972

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>hsa:9023

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>hsa:9088

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>hsa:94

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>hsa:9601

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