

Fig. 1A

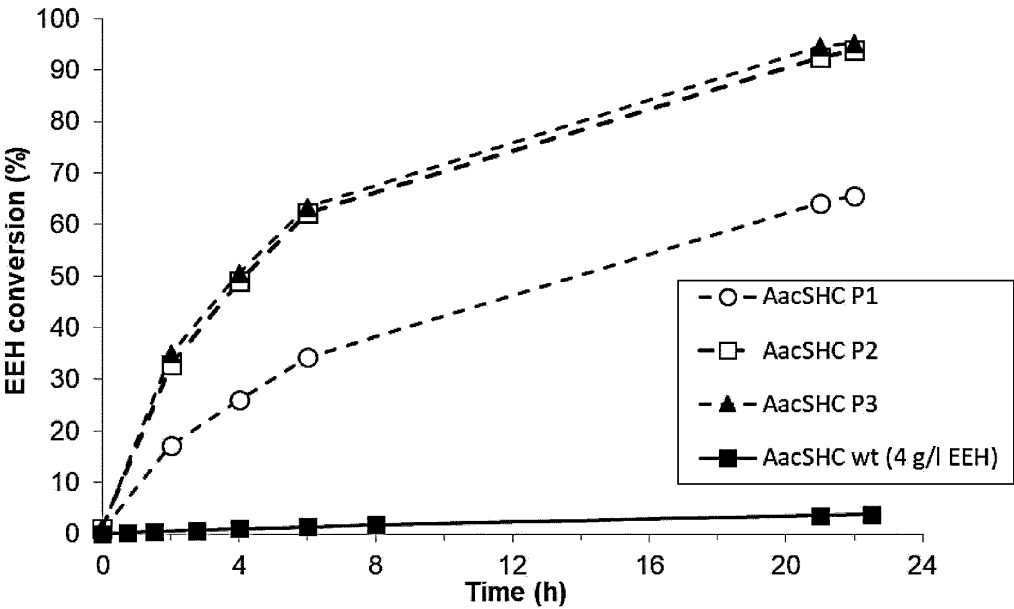


Fig. 1B

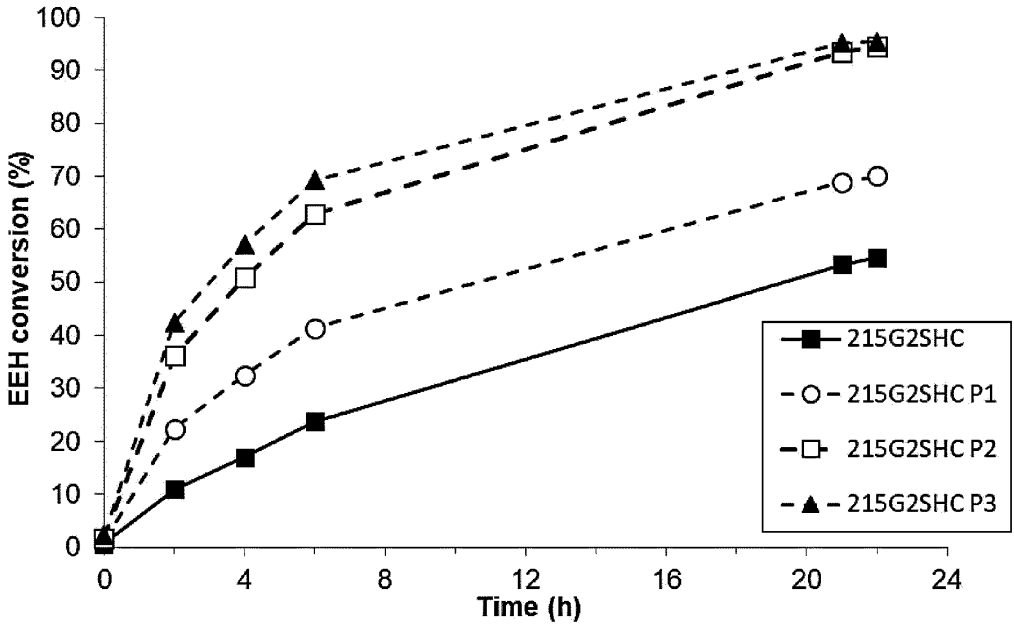


Fig. 2

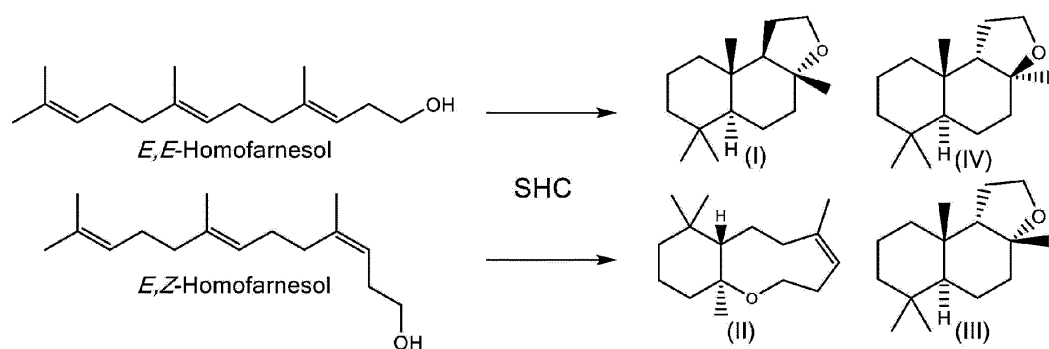


Fig. 3

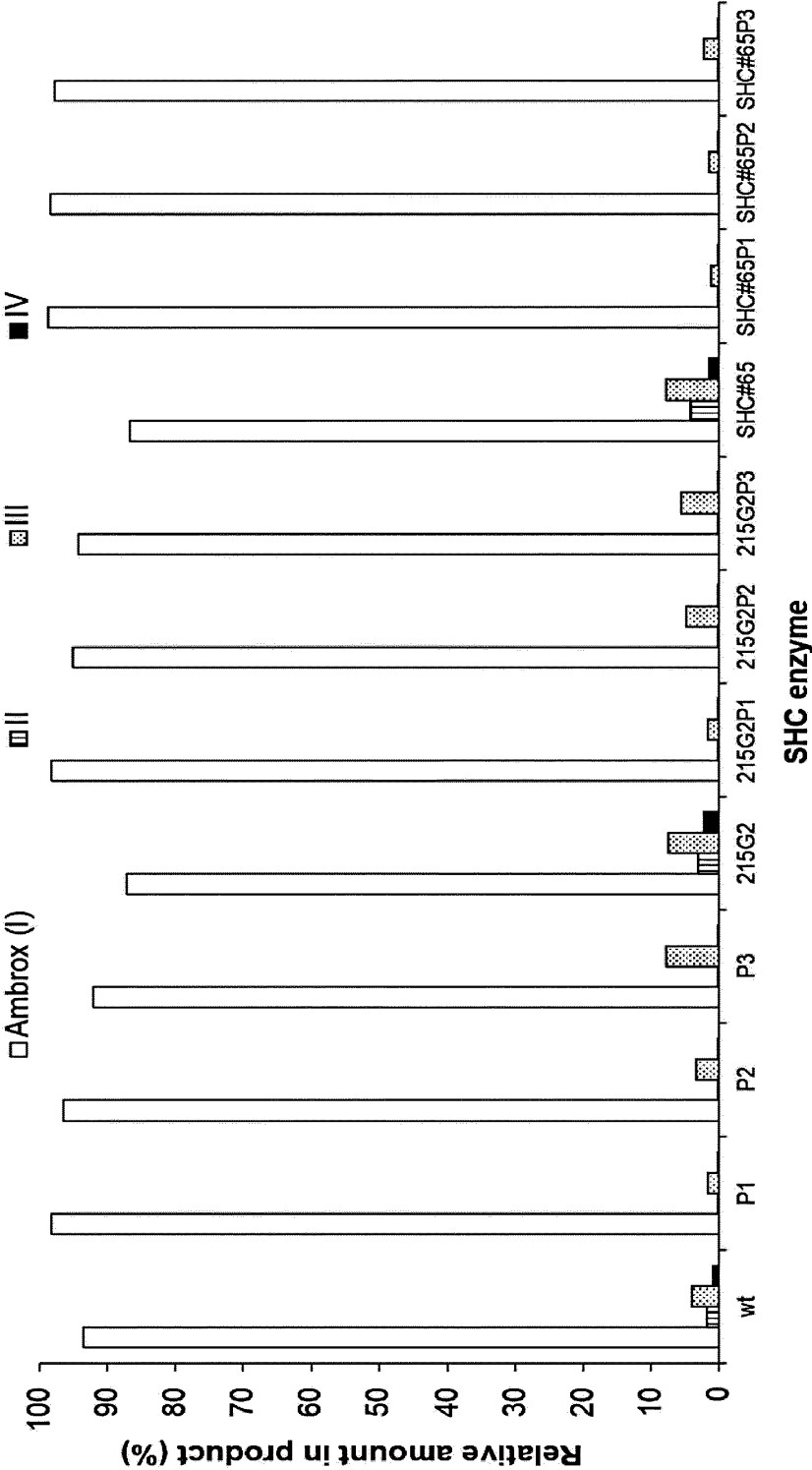


Fig. 4

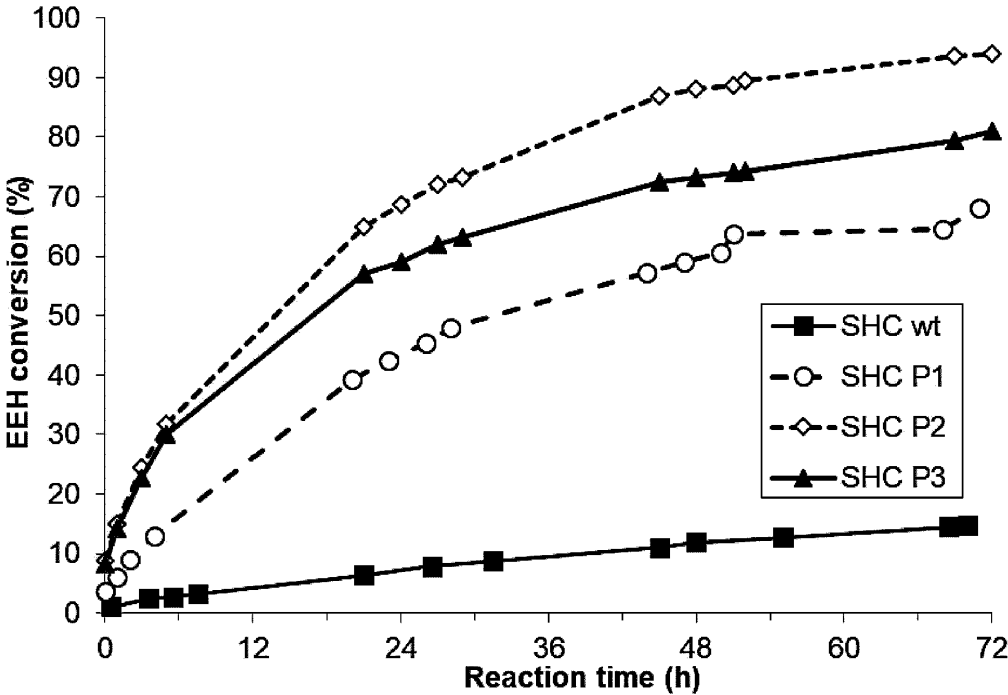


Fig. 5

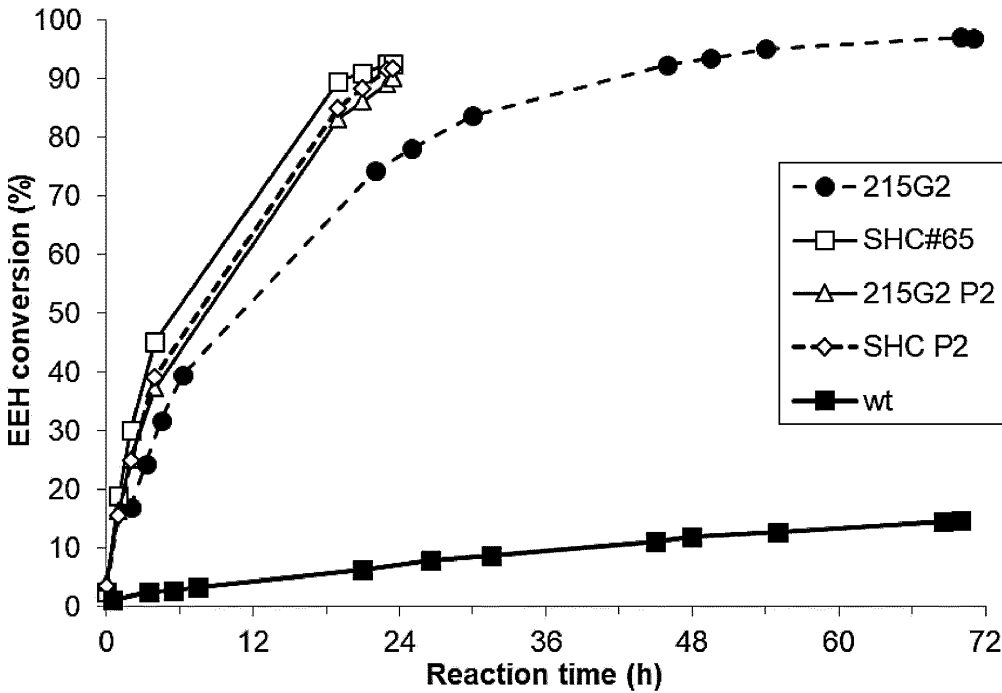


Fig. 6

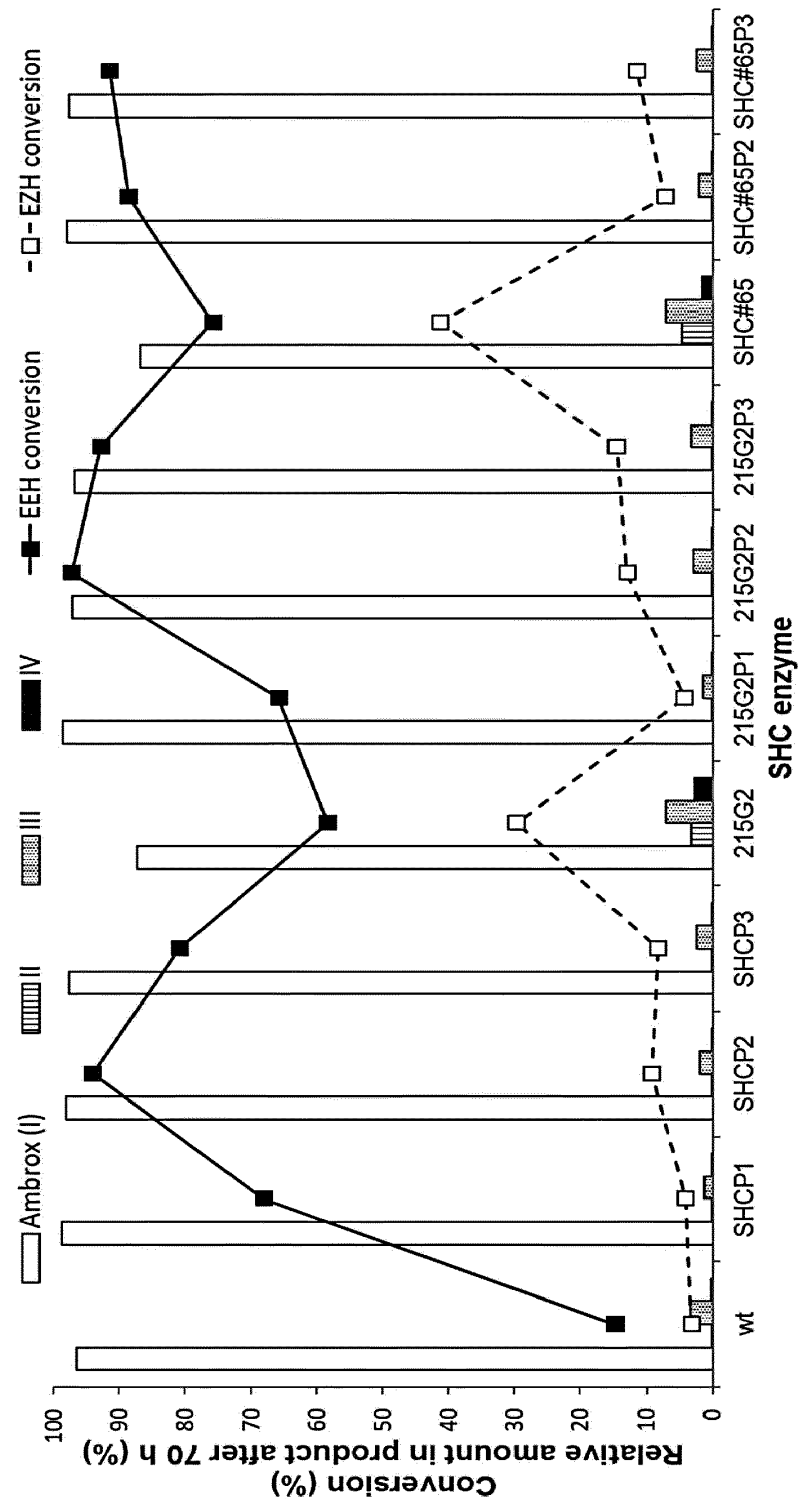


Fig. 7

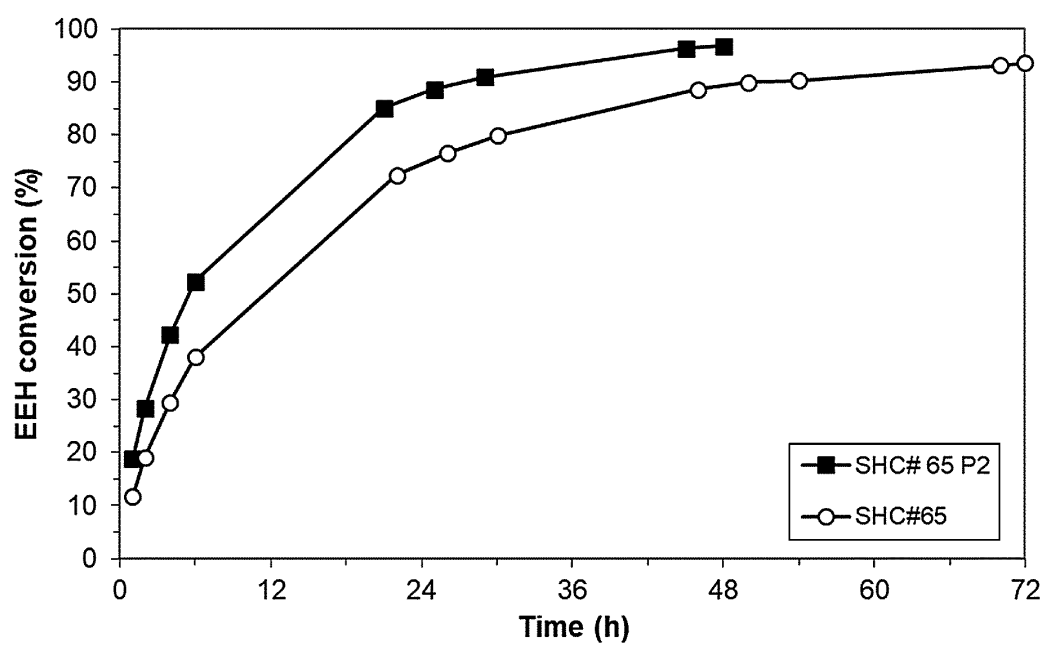


Fig. 8A

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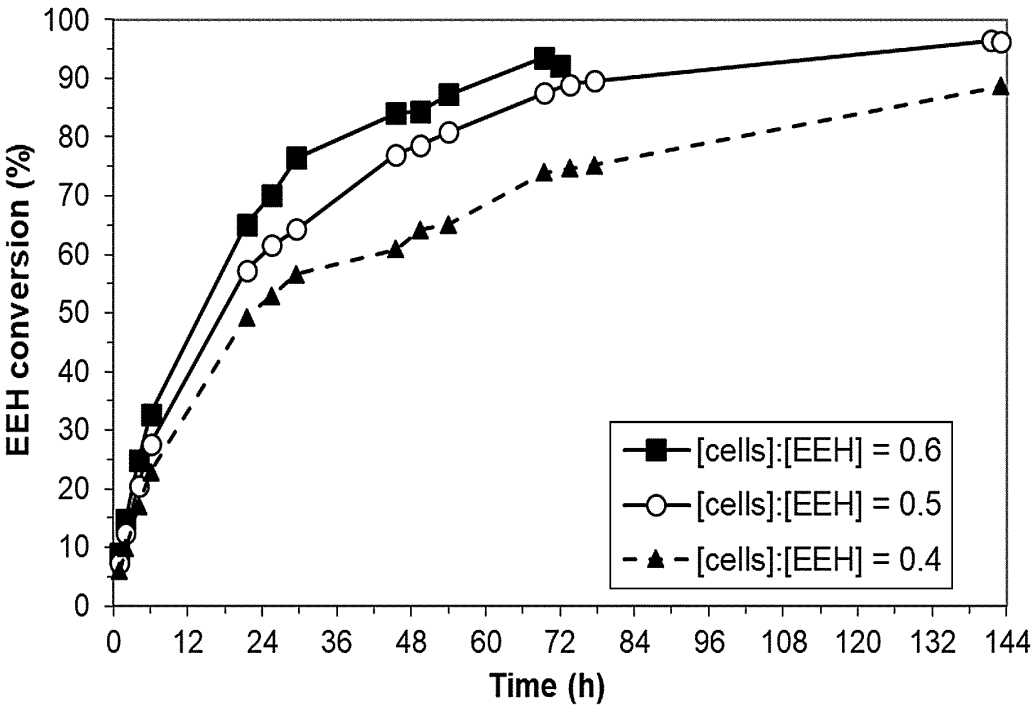


Fig. 8B

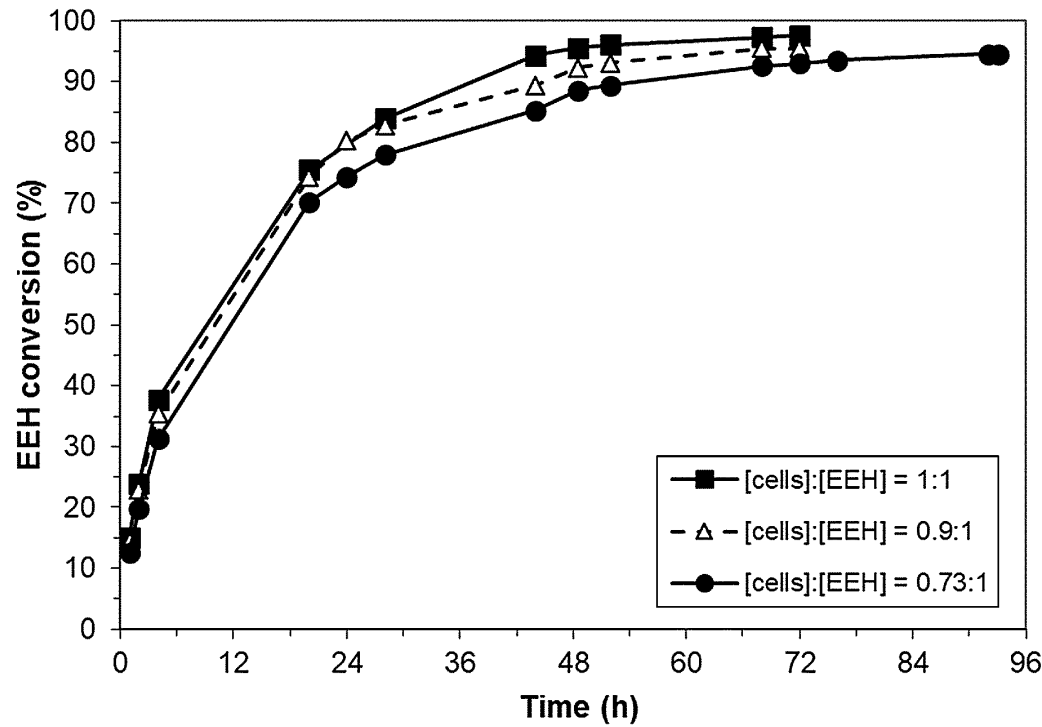


Fig. 9(1)

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BmeSHC	-----MIILL	5
BamSHC2	-----MIRRMNKSGPSFW	13
PmeSHC	-----MH-----NQFPF-----RDNLISIAVGQSSGATSN	24
BamSHC1	-----MNDLT-EMATLSAGTVP	16
ZmoSHC2	-----MTVS-TSSAFHHSPLS	15
BjaSHC	-----MTVT--SS-----A----SARATRDPGNYQ	19
RpaSHC1	-----M--DS-----I----LAPRADAPRNID	16
GmoSHC	-----MSPADISTKSSSFQRLD	17
ApaSHC1	-----MNMASRFSCLKILRSGSDTQGTNVNTLIQSGTSDIVRQKPAPQEPADLSALKAMG	55
ZmoSHC1	MGIDRMNSLSRLLMKKIFGAEKTSYKPSADTTIGTDTLKRPNRRPEPTAKVDKTIKFTMG	60
TtuSHC	-----MEIQDEVDLLEPQESLT	17
PcaSHC2	-----MNV-----IRQLNSGVNAA	14
SfuSHC1	-----MRRLDTFPPE-----IPTGSR--DKPPSGEEHSCSTPAEPLR	35
TelSHC	-----MPTSLATAIDP	11
AacSHC	-----MAEQLVEA	8
ScoSHC	-----MTATTDGSTGASLRPLAA-----SASDTDITIPAAAAGVP	35
BmeSHC	KEVQLEIQRRRIAYLRPTQKNDGSGFRYCFETGVMPDAFLIMLLRTFDLDKEV-LIKQLTER	64
BamSHC2	SALDAAIARGRDALMRLQPPDGSWCFELES DATITAEYILMMHFMKDIDDA-RQEKMARY	72
PmeSHC	ADLTEAVDRATDALLARQLPEGHWHYPLESDVATTAHYLLAARYLGEAIECEVEVKIAGY	84
BamSHC1	AGLDAAVASATDALLAAQNADGHVWVELEADSTIPAEYVLLVHYLGETPNLELEQKIGRY	76
ZmoSHC2	DDVEPI IQKATRALLEKQQQDGHVWFLEADATIPAEYILLKHLYLGEPEDELEIAKIGRY	75
BjaSHC	TALQSTVRAAADWLIANQKPDGHVWVGRAESNACMEAQWCLALWFMGLE DHP-LRKRLGQS	78
RpaSHC1	GALRESVQQAADWLVANQKPDGHVWVGRAETNATMEAQWCLALWFLGLE DHP-LRVRLGRA	75
GmoSHC	NMLPEAVSSACDWLIDQQKPDGHVWGPVESNACMEAQWCLALWFLGLE DHP-LRPRLQA	76
ApaSHC1	NSLTHTLSSACEWLMKQKPDGHVWVGSGNASMEAWECLALWFLGLE DHP-LRPRLGKA	114
ZmoSHC1	NSLNNTLVSACDWLIGQQKPDGHVWVGAVESNASMEAWECLALWFLGLE DHP-LRPRLGNA	119
TtuSHC	ASADSAVDRALFWLLDAQYEDGYWAGILES NACMEAEWLLCFHVLGIANHP-MSRGLVQG	76
PcaSHC2	KSLDDGIESAIEWLAENQKEGFWVGMLESNSCIAEWILAMHLLGVKDDP-KYDKVVQA	73
SfuSHC1	SRLDEGILRAVDWLVCQHPDGFAGMLQSNCSMEAWEVLAMHFLGIDDDP-KYDGVIRA	94
TelSHC	KQLQQAIRASQDFLFSQQYAEGYWAAELSNVTMTAEVILLHKIWGTEQRL-PLAKAEQY	70
AacSHC	PAYARTLDRAVEYLLSCQKDEGYWGPPLSNVTMEAEYVLLCHILDRVDRD-RMEKIRRY	67
ScoSHC	EAAARATRRATDFLLAKQDAEGWKGDLTNTVMTDAEDLLLRQFLGIQDEE-TTRAAALF	94
* * : * : . * :		
BmeSHC	IVSLQN--EDGLWTLFDDEE-HNLSATI QAYTALLYSGYYQKNDRILRKAERYIIDSGGI	121
BamSHC2	LRAIQRLDTHGGWDLYVDGD-PDVSCSVKAYFALKAAAGDSEH-APHMVRARDAILELGGGA	130
PmeSHC	LRARQL--PEGGWPLDADGP-INVSSSVLAYFALKLLGDAPD-APHMRRACTAIRAHGGA	140
BamSHC1	LRRVQQ--ADGGWPLFTDGA-PNISASVKAYFALKVIGDDEN-AEHMQRRARAIQAMGGA	132
ZmoSHC2	LRRIQG--EHGGWSLFYGGD-LDLSATVKAYFALKMIGDSPD-APHMLRARNELIARGGA	131
BjaSHC	LLDSQR--PDGAWQVYFGAPNGDINATVEAYAALRSLGFRDD-EPAVRRAREWIEAKGGL	135
RpaSHC1	LLDTQR--PDGAWHVYFGAPNGDINATVEAYAALRSLGHRDD-EEPLRKARDWILSKGGL	132
GmoSHC	LLEMQR--EDGSWGIYVGADHGDINTTVEAYAALRSMGYAAD-MPIMAKSAAWIQKGGGL	133
ApaSHC1	LLEMQR--PDGSWGTYYGAGSGDINATVESYAALRSLGYAED-DPAVSKAAAWIISKGGL	171
ZmoSHC1	LLEMQR--EDGSWGVYFGAGNGDINATVEAYAALRSLGYSAD-NPVLKAAAWIAEKGGL	176
TtuSHC	LLQRQR--ADGSWDVYYGARAGDINTTVEVYAALRCQGYAAD-HPDIKRARDWIQLQGGV	133
PcaSHC2	ILNEQR--EDGSWAVYYDAPAGDINATVEAYAALRTAGFGAG-DERLIKARNWIFSHGGL	130
SfuSHC1	ILGEQR--ADGSWGVFHKAPNGDINTTVECYAALRASGLAPE-SAPLSSAREWILAGGGL	151
TelSHC	LRNHQR--DHGGWELFYGDG-GDLSTVEAYMGLRLLGVPET-DPALVKARQFILARGGI	126
AacSHC	LLHEQR--EDGTWALYPGGP-PDLDTTIEAYVALKRLIGMSRD-EEPMQKALRFIQSQQGI	123
ScoSHC	IRGEQR--EDGTWATFYGGP-GELSTTIEAYVALRLAGDSPE-APHMARA EWIRSRGGI	150
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BmeSHC	SRAHFLTRWMLSVNGLYEWPKLFYLP LSLLLVPTYVPLNFYELSTYARIHFVPMMVAGNK	181
BamSHC2	ARSNVFTRILLATFGQVPWRATPFMPIEFVLFPKWVPI SMYKVAYWARTTMVPLLVLCSL	190
PmeSHC	ESSNVFARFMLALFGLVPWRALPTMPVILLAPRWFPFHLAKMASWARLVLPVLVISNQ	200
BamSHC1	EMSNVFTRIQLALYGAIPWRAVPMMPVEIMLLPQWFPFHL SKVSYWARTVIVPLLVLNK	192
ZmoSHC2	MRANVFTRIQLALF GAMSWEHVPQMPV EIMLMP EWFVPHINKMAYWARTVIVPLLVLQAL	191
BjaSHC	RNIRVFTRYWLALIGEWPEKTPNIPPEVIWFLWFPFSIYNFAQWARATLMPIAVLSAR	195
RpaSHC1	ANIRVFTRYWLALIGEWPEKTPNIPPEVIWFLWFPFSIYNFAQWARATLMPIAVLSAR	192
GmoSHC	RNVRFVTRYWLALIGEWPDKTPNLPPEIIWLPDNFIFSIYNFAQWARATMMPLTILSAR	193
ApaSHC1	KNRVFVTRYWLALIGEWPEKTPNLPPEIIWLPDNFVFSIYNFAQWARATMMPLAILSAR	231
ZmoSHC1	KNIRVFTRYWLALIGEWPEKTPNLPPEIIWLPDNFVFSIYNFAQWARATMVPIAILSAR	236

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ttuSHC	KQVRVFTRFWLALIGEPWWEETPNLPPEILFFPRWFFPNFYHFAAMARATLVPLCILSAR	193
PcaSHC2	KNVRVFTRYWLALIGEPWDETALAPAEI IYLPAPWCPLNIYDFACARATLVPLSVLSVR	190
SfuSHC1	ANIRNFTKYWLALIGEPWEGTPTIPPELIFFPRMPLNIYHFASWARTIVPLSILSAR	211
TelSHC	SKTRIFTKLHLALIGCYDWRGIPSLPPWIMLLPEGSFPTIYEMSSWARSSTVPLLIVMDR	186
AacSHC	ESSRVTRMVLALVGEYPWEKVPMPVPEIMFLGKRMPIN IYEFGSWARTIVVALSIVMSR	183
ScSHC	ASARVFTRIWLALVGGWKWDDELPELPELIYFPTWVPLNIYDFGCMARQTI VPLTIVSAK	210
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BmeSHC	KFSLTSRHPTSLSHLDVREQKQSESETTQES----RASIFL-VDH-LKQLASL-P-----	229
BamSHC2	KARARNPRNIAIPELFVTPPDQERQYF---PARGMRAFLALDRVVRHVEPLP-----	242
PmeSHC	RPLAKNLQNTGLEELFIHLPSRLGLPPRAPHQQPARFACLVAVDRLLGLFDKAWP-----	255
BamSHC1	RPIAKNPRGVRIDELFVDPVPPVNAAGLLPRQGHSPGWFAFFRVVDHALRAADGLFP-----	224
ZmoSHC2	KPVARNRRGILVDLFEVDPVL-----PTLQESGDPIWRFFSALDKVLHKVEPYWP-----	242
BjaSHC	RPSRLPLPENRLDALFPHGRKAFDYELVPVKGAGWDRFFRGADKVLHKLQNLGNRL-NL	254
RpaSHC1	RPSRLPLAQDRLDALFPQGRDSFN YDLPARLGAAGVVDVIFRKIDITLHLRLQDWGARRGPH	252
GmoSHC	RPSRPLLPENRLDGLFPEGRENFDYELPVKGEEDLWGRFFRAADKGLHLSQSFVRR-----	250
ApaSHC1	RPSRLPLRPQDRLDALFPGGRANFDYELPTKEGRDVIA DFFRLADKGLHNLQSSFLKR-----	288
ZmoSHC1	RPSRLPLRPQDRLDDELFP EGRARFDYELPKKEGIDLWSQFFRTTDRGLHWWQSNLLKR---	293
TtuSHC	RMVVLNKLKSSCLQELFPEDRSVAVA-----LGKKAGAWSTFFYHADRALKKYQRTFK-----R	246
PcaSHC2	RPVKPLPAESRLDELFP EGRENADYSLPECKEGLA-ERFLLVVDWFLKKYNRL-P-----M	244
SfuSHC1	RPVRLPEPEDRLDELFPQGRSAFDFRLPRKDGWLSWEGFFHVCDRILRLYART-R----R	266
TelSHC	KPVYGMDDPPIITLDELYSEGRANVVELPRQG-----DWRDVFITGLDRVFKLFETLNI-----	238
AacSHC	QPVFPLPERARVPEL-Y-ETDVPPRRRGAKG-----GGGWIFDRLDRALHG YQKLSV-----	233
ScSHC	RPVRPAPRPLDELHDTDP-ARNPNRPLAPVA-----SWDGAFCRDLKALHAYRKVAP-----	261
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BmeSHC	SYIHKLGYYQAAERYMLERIEKDGTLYSYATSTFFMIYGLLALGYKKDSFVIQK AIDGICS	289
BamSHC2	KRLRQRAIRHAQAWCAERMNGEDGLGGIFPPIVYSYQMMMDVLGY PDDHPLRRDCENALEK	302
PmeSHC	KRLKQRAIDTALTFVGERLNGESGLGLGHVATMLASLMIETVGFPEHMPRMVARQASNK	315
BamSHC1	NYTTRAIRQAVSFVDERLNGEDGLGAIYPAMANVMYDVLGYAEDHPNRAIARKSIEK	307
ZmoSHC2	KNMRAKAIHSCVHFVTERLNGEDGLGAIYPATANSVMYDALGYENHPERAIARRAVEK	302
BjaSHC	GLFRPAATSRVLFWMIIRHQDFDGA WGGIQQPWIYGLMALYAEGYPLNHVPLAKGLDALND	314
RpaSHC1	GMRRGAIDHVLQWIIRHQDYDGSWGGIQQPWIYGLMALHTEGYAMTHPVMAKALDALNE	312
GmoSHC	FVPREAAIRHVIEWIIIRHQDADCGWGGIQQPWIYGLMALSVGYPLHHPVLAKAMDALND	310
ApaSHC1	APSREAAIKYVLEWIIWHQDADCGWGGIQQPWWYGLMALHGEGYQFHHVPMAKALDALND	348
ZmoSHC1	NSLREAAIRHVLEWIIIRHQDADCGWGGIQQPWWYGLMALHGEGYQLYHPVMAKALSALDD	353
TtuSHC	PPGRQAIKMCLEWILRRQDADGA WGGIQQPWIYSLMALKAEGYPTVTHPVMAKGLAALDA	306
PcaSHC2	QFGREKAIIRLCLEWIVRHQDYDGGWGGIQQPLIYSLIALNTEGYGINHPVISKGLDAFNP	304
SfuSHC1	APFRETAIRVCLLEWIIIRQETDGAWSGIQQPWIYALLALHAEGYGLDHPILRAGLRAFDS	326
TelSHC	HPLREQGLKAAEEWVLREQASGDWGGIIPAMLNSLLALRALDYAVDDPIVQRGMAAVDR	298
AacSHC	HPFRRAAEIRALDWLLERQAGDGSWGGIQQPWFYALIALKLTDMT-QHPAFIKGWEGLEL	292
ScSHC	RRLRRAAMNSAARWIIERQENDCGWGGIQQPAVYSVIALYLLGYDLEHPVMRAGLES LDR	321
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BamSHC2	LIVTR-----PDGSMYQCPCLSPVWDTAWSTMALEQARGAVAPEAGAPASALDEL DARI A	357
PmeSHC	LLVIE-----EEQAYCQPCSPVWDTAWALHALLTQTLRG-----CSAAL	356
BamSHC1	LLVVQ-----EDEAYCQPCSPVWDTSLAAHALLTGDARA-----EEAVI	348
ZmoSHC2	LMVLDGETDQGDKEVYCQPCLSPIWDTALVAHAMLEVGGDEA-----EKSAI	349
BjaSHC	PGWRV-----DVGDATYIQATNSPVWDTILTLA FDDAGVLGD-----YPEAVD	358
RpaSHC1	PGWRI-----DIGDATFIQATNSPVWDTMSLALFDAGLGER-----YPEQVE	356
GmoSHC	PGWRR-----DKGDASWICATNSPVWDTMLAVIALHDAGAEDR-----YSPQMD	354
ApaSHC1	PGWRH-----DKGDASWICATNSPVWDTMSLALHDA NAER-----FTPMD	392
ZmoSHC1	PGWRH-----DRGESWICATNSPVWDTMLMALHDKAKAE DR-----FTPMD	397
TtuSHC	HWSYE-----RPGGARFVQACESPVWDTLLSSFALLDCGF SCT-----SSSEL R	350
PcaSHC2	PWAYE-----KNGGV-YLQCS ESPVWDTLFTMLALFESGC SFD-----DTPMMR	347
SfuSHC1	HWSYE-----RDGGI-YLQCS ESPVWDTVLSRALADCGEERK-----ASVSIA	369
TelSHC	FAIET-----ETE-Y-RVQPCVSPVWDTLSLRALVMRVD SGVAP-----HPALV	339
AacSHC	YGVEL-----DYGGW-MFCASISPVWDTGLAVIALRAAGLPAD-----HDLRV	334
ScSHC	FAVWR-----EDGAR-MIRACQSPVWDTCLATIALADAGVPED-----HPQLV	363
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BmeSHC	GTRYRLKQRQHT-KLGDQGFHNP-NTAPGGWGFSDINTNNPDLDDTSAAIRALSRR AQT D	388
BamSHC2	RAYDWLAERQVNDLRGDWTFENAPADTPGGWAFQYANPYYPIDDSAVVTAMLD RRGRT H	417
PmeSHC	QGAQWLRLTQILEVHGDWAQAP-DLPPGGWAFQYRNERYPDVDDSAVVAAALHRA SRLN	415
BamSHC1	RGLEWLRLPQLLDVVRGDWISRRP-HVRPGGWAFQYANPHYD VDDTAVVAVAMDRVQKLK	407
ZmoSHC2	SALSWLKPQILLDVKGDWAWRRP-DLRPGGWAFQYRNDYYPD VDDTAVVTAMDRAPKL	408
BjaSHC	KAYDWVLQROQVR-VPGDWSMKLP-HVKPGGWAFFYANNYPEDTD TAVALIALAPLRHDP	411

Fig. 9(3)

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RpaSHC1	RAVRWVLKRQVL-VPGDWSVKLP-DVKPGGWAFYANNFYPD TDDTSVALMALAPFRHDP	414
GmoSHC	KAIGWLLDRQVR-VKGDWSIKLP-DTEPGGWAFYANDKYPD TDDTAVALIALAGCRHRP	412
ApaSHC1	KALDWLLSRQVR-VKGDWSVKLP-NTEPGGWAFYANDRYPD TDDTAVALIAIASCRNRP	450
ZmoSHC1	KAADWLLARQVK-VKGDWSIKLP-DVEPGGWAFYANDRYPD TDDTAVALIALSSYRDK	455
TtuSHC	KAVDWILDQQVL-LPGDWQKLP-TVSPGGWAFERANVHYPD VDDTAVALIVLAKVRPDY	408
PcaSHC2	PALDWILSKQIT-SWGDWQVKVR-GVRPGGWAFERANTAYPD VDDTALALVLAFAARHV	405
SfuSHC1	SALEWLLNRQIS-VPGDWAVRVP-SVPCGGWAFQANSFYPD VDDTAVAIEVLARLRPFT	427
Te1SHC	KAGEWLLSKQIL-DYGDWHIKNK-KGRPGGWAFEFENRFYPD VDDTAVVVMALHAVTLPN	397
AacSHC	KAGEWLLDRQIT-VPGDWAVKRP-NLKPGGFAFQFDNVYYPD VDDTAVVVMALNTRLRPD	392
ScoSHC	KASDWMLGEQIV-RPGDWSVKRP-GLP PGGWAFEFHNDNYPD IDDTAEVVLARVRHHD	421
	:: * *** . **:.* * ** *: : . :	
BmeSHC	T-----DYLESWQRGINWLLSMQNKDGGFAAFEKNTDS ILFTYLPLENAKDAATDPATA	442
BamSHC2	RNADGSHPHYAARVARALDWMRGLQSRNGGFAAFDADCDRLYLNAIPFADH-GALLDPPT	476
PmeSHC	ADKA---GL-EATTRACRWVAGLQSRNGGWGAYDRONTAEYLN DLBPFAH-AAMTDAPTA	470
BamSHC1	-HND---AFRDSIARAREWVVMQSSDGGWGAFEPENTQYYLNNIPFSDH-GALLDPPT	462
ZmoSHC2	DLHD---DFEESKARAMEWTIGMQSDNGGWGAFDANNSTYLLNNIPFADH-GALLDPPT	464
BjaSHC	KW---KAGIDEAIQLGVDWLGIMQSQGGWGAFDKDNQKILTKIPFCDF-GEALDPPSV	473
RpaSHC1	KW---QAEGIEDAIQIRGIDWLAMQCKEGGWGAFDKDNKILAKIPFCDF-GEALDPPSA	471
GmoSHC	EW---RERDIEGAISRGVNWLLAMQSSSGGWGAFDKDNRSILTKIPFCDF-GEALDPPSV	469
ApaSHC1	EW---QAKGVEEAIGRGVRLVAMQSSCGGWGAFDKDNKILAKIPFCDF-GEALDPPSV	507
ZmoSHC1	EW---QKKGVEDAITRGVNWLLIAMQSECGGWGAFDKDNRSILSKIPFCDF-GEALDPPSV	512
TtuSHC	PD---TARVNLAIERGLNWLIFAMQCRNGGWGAFDKDNKDLLTKIPFSD-GETIDPASV	464
PcaSHC2	KD---SAAVDAALERAEEWILGLQCRNGGWAAFDNRNNSAIVTKIPFCDF-GEVLDPPSV	461
SfuSHC1	AN---QSAVDRAIRSARDWVLMQCSNGGWAAFDNRNDFKLVTKIPFCDF-GELLDPSPV	483
Te1SHC	EN-----LKRAIERAVAWIASMQCRPGGWAAFDVNDQDWLNGIPYGD-LKAMIDPNTA	451
AacSHC	ER-----RRRDAMTKGFRWIVGMQSSNGGWGAYDVNTSDLENHIFPCDF-GEVTDPPSE	446
ScoSHC	PE-----RVEKAIGRGVRLNLMQSKNGAWGAFDVDNTSAFPNRLPFPCDF-GEVIDPPSA	475
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BmeSHC	DLTGRVLECLGNFAGMKNKSHPSIKAADVWLFQDLNDSWYGRWGVCIYIGTWAAITGLR	502
BamSHC2	DVSGRVLCLCFVTKR-ADDRASLARAI DYVKRTQQPDGSSWGRWGTNYLYGTWSVLAGLA	535
PmeSHC	DVTSRCLSLAPFQQDAEEARVVRDAVDCLWAMQESDGSWLGHGWGTYYIGTWSALCALD	530
BamSHC1	DVSGRCLSMQLGETPLNSEPARRALDYMLKEQEPDGSWYGRWGMNYYIGTWTALCALN	522
ZmoSHC2	DVSARCVSMMQAQAGISI-TDPMKAAVDYLLKEQEEEDGSWFRGWGVNYIYGTWSALCALN	523
BjaSHC	DVTAHIEAFKGLGIS-RNHPSMVQALDYIRREQEPSPGWFRGWGVNYIYGTGAVLPALA	532
RpaSHC1	DVTAHIEAFKVLGLD-RNHPSIVRALDYLKREQEPGPWFGRGWGVNYIYGTGAVLPALA	530
GmoSHC	DVTAHVLEAFGLLGIS-RNHPSVQKALAYIRSEQERNGAWFRGWGVNYIYGTGAVLPALA	528
ApaSHC1	DVTAHVLEAFGLLGLP-RDLPCIQRGLAYIRKEQDPTGPWFGRGWGVNYIYGTGAVLPALA	566
ZmoSHC1	DVTAHVLEAFGLTGLS-RDMPVTQKAI DYVRSEQEAEAGWFRGWGVNYIYGTGAVLPALA	571
TtuSHC	DVTAHVLEALGLLGYR-TTHPAVAKALEFIRSEQENDGCWFRGWGVNYIYGTAAVLPALA	523
PcaSHC2	DVTAHVVEALALGRD-RHDPVVARALKYIRSEQEPGGSWFRGWGVNHIYGTCAVLPALA	520
SfuSHC1	DVTAHVIEALALGWD-MTSREIEAAVSFIRREQEAGSWFRGWGVNHIYGTATVLPALR	542
Te1SHC	DVTARVLEMVGRCLQA-FDRVALDRALAYLRNEQEPGCVFGRGWGVNYIYGTSGVLTALS	510
AacSHC	DVTAHVLECFGSFGYD-DAWKVIRRAVEYLKREQKPDGSWFRGWGVNYIYGTGAVVSALK	505
ScoSHC	DVTAHVVEMLAVEGLA-HDP-RTRRGIQWLLDAQETDGSWFRGWGVNYIYGTGSVIPALT	533
	*::: : .. : : * * * *: : : : : *	
BmeSHC	AVGVASADPRIIKAINWLKSIQQEDGGFGESCYSASL-KKYV--PLSFSTPSQTAWALDA	559
BamSHC2	LAGEDPSQPYIARALAWLRARQHADGGWGETNDSYID-PALAGTNAGESTSNCTAWALLA	594
PmeSHC	TAGVDHQDPRMQRAARWLVS IQNDGGWGESAGAHEV-S-DVGHYRAASTASQTAWAMLG	588
BamSHC1	AAGLTPDDPRVKRGAWLLSIQNKDGGWGEDGDSYKL-N-YRGFEQAPSTASQTAWALLG	580
ZmoSHC2	VAAALPHDLAVQKAVAWLKT IQNEDGGWGENCDSYAL-D-YSGYEPMDSTASQTAWALLG	581
BjaSHC	AIGEDMTQPYIGRACDWLVAHQDQADGGWGESCASYMD-VSAV--GRGTTTASQTAWALMA	589
RpaSHC1	AIGEDMRQPYIARACDWLIARQQANGGWGESCVSYMD-AKQA--GEGTATASQTAWALMA	587
GmoSHC	AIGEDMTQPYIVRACDWLMSVQQENGWGESCASYMD-INAV--GHGVATASQTAWALIG	585
ApaSHC1	ALGEDMTQPYISKACDWLINCQENGWGESCASYME-VSSI--GHGATTPSQTAWALMG	623
ZmoSHC1	AIGEDMTQPYITKACDWLVAHQDQEDGGWGESCSSYME-IDSI--CGKPTTPSQTAWALMG	628
TtuSHC	SLNMNMNQEYIRRAANWILGKQNDGGWGESCASYMD-DTQR--GRGPSTASQTAWAMMS	580
PcaSHC2	AIGEDMRAPYVLRADWLVHRQNDGGWGESCASYMD-DSQC--GQGSSTASQTGWALMA	577
SfuSHC1	AIGEDMSSAYVLRADWLASRQNDGGWGETPASYMD-DSLR--CVGESTASQTAWAIMG	599
Te1SHC	LVAPRYDRWRIRRAAEWLMQCCNADGGWGETCWSYHD-PSLK--GKGSTASQTAWAIIIG	567
AacSHC	AVGIDTREPYIQKALDWVEQHQNPDGGWGEDCRSYED-PAYA--CGKASTPSQTAWALMA	562
ScoSHC	AAGLPTSHPAIRRAVRWLESVQNEGGWGEDLRSYRVREWS--GRGASTASQTGWALMA	591
	: . * : : : : : * . * : : .	
BmeSHC	LMTICPL---KDQSVKGIKFLNPNLTE--QQTHYPTGICLPG-----	598
BamSHC2	QMAFGDG---ESESVRGIAYLQSVQQDDGFWHRSNAPGFP-----	635

PmeSHC	LMAAGAV---	GHPAVSRGADYLIATQRDQGGWAESGFTGAAVQK-----	629
BamSHC1	LMAAGEV---	NNPAVARGV EYLIAEQKEHGLWDETRFATCFPR-----	621
ZmoSHC2	LMAVGEA---	NSEAVTKGINWL AQNQDEEGLWKEDYYSGGCFPR-----	622
BjaSHC	LLAANRPQ---	DKDAIERGC MWLVERQ-SAGTWDEPEFTGTGFPGYG VGTIKLNDPALS	645
RpaSHC1	LIAADR PQ---	DRDAIERGC LYLTETQ-RDGTWQE VH YTGTFPGYG VGTIKLNDPLLS	643
GmoSHC	LLAAKR PK---	DREAIARGC QFLIERQ-EDGSWT EEYTGTGFPGYG VGTI KLDDPSLP	641
ApaSHC1	LIAANR PQ---	DYEAI AKGCRY LIDL QEEDGSWN EEFTGTGFPGYG VGTI KLDDPAIS	680
ZmoSHC1	LIAANR PE---	DYEAIAKGCHYLIDRQE QDGSWKEEF TGTGFPGYG VGTI KLDDPALS	685
TtuSHC	LLAVDGGT---	YAESLLRAEAYLKTTQTPEG TWDEPYTGTGFPGYGIG RREIKR---Q	633
PcaSHC2	LVAMSSHD---	YDEAIRGLDYLLSHQ-KSGTWDE PQTGTGFPGYG VGERTNLKEA--G	631
SfuSHC1	LVAVGSGA---	HDDTVRRGID FLLFAQ-HGGTWEE PQTGTGFPGYSV GERIRLRDM--G	653
TelSHC	LLAAGDATGDYATEAIE	RGIA YLLETQRPDG TWHEDYFTGTGFPC-----	612
AacSHC	LIAGGRA---	ESEAARRGVQYLVETQR PDGWD EPY TGTGFPG-----	603
Sc oSHC	LLAAGER---	DSKAVERGVAWLAATQR EDGSD EPY TGTGF PW-----	632
	:	: : * :	
BmeSHC	-----	QFYIQYHSYN DIFLLALAHYAKKHSS-----	625
BamSHC2	-----	IFYLKYHYGYTAIF PLWALARYRRLAGGVSAAGAHAVPASTGADAA-LA-	682
PmeSHC	-----	VMYLRYHGYS EYFPLWALARYRN L-----	653
BamSHC1	-----	VFYLR YHCYRKFFPLWALARYRN LKRNNATRVTFGL-----	657
ZmoSHC2	-----	VFYLR YHGYSKYFPLWALARYRN LKKANQP I VHYGM-----	658
BjaSHC		QRLMQGP ELSRAFMLRYGMYRH YFPLMALGRALRPQSHS-----	684
RpaSHC1		KRLMQGP ELSRSF MLRYDL YRHYP MMAIGRV LRQRGDRSGH-----	685
GmoSHC		DRLLQGAE LSRAFMLRYDLYRQYFPVM ALSRARMMKEDASAAA-----	685
ApaSHC1		KRLMQGAELSRAFMLRYDLYRQLFPI IALSRASRLIKGN-----	720
ZmoSHC1		KRLMQGAELSRAFMLRYDFYRQFFPIM ALSRAERLIDLNN-----	725
TtuSHC		RSLQQHAEL SRGFMINYNLYRH YFPLMALGR LAALRGA-----	671
PcaSHC2		ATLDQGC ELAR GFMINYNMYRH YFPLIAMARRHLGLAANPRHQDSRSSVEVAPEALRG	691
SfuSHC1		ASLKQGT E LQRAFMINYNLYRH YFPLMALGRARYHLQLRRSAREGGNGETTPNGS-AL--	710
TelSHC		-----HFY LKYHY YQQHFPL TALGRYARWRNLLAT-----	642
AacSHC		-----DFY LGYTM YRHVFP TTLALGRYQQA IERR-----	631
Sc oSHC		-----DFS INYNLYRQVFP L TALGRYVHGEPFAKKPRAADAPAE--AAPAEVKG	679
		: : * * ** *:.	
BmeSHC	----	625	
BamSHC2	----	682	
PmeSHC	----	653	
BamSHC1	----	657	
ZmoSHC2	----	658	
BjaSHC	----	684	
RpaSHC1	----	685	
GmoSHC	----	685	
ApaSHC1	----	720	
ZmoSHC1	----	725	
TtuSHC	----	671	
PcaSHC2	RACG	695	
SfuSHC1	----	710	
TelSHC	----	642	
AacSHC	----	631	
Sc oSHC	S----	680	

Fig. 10

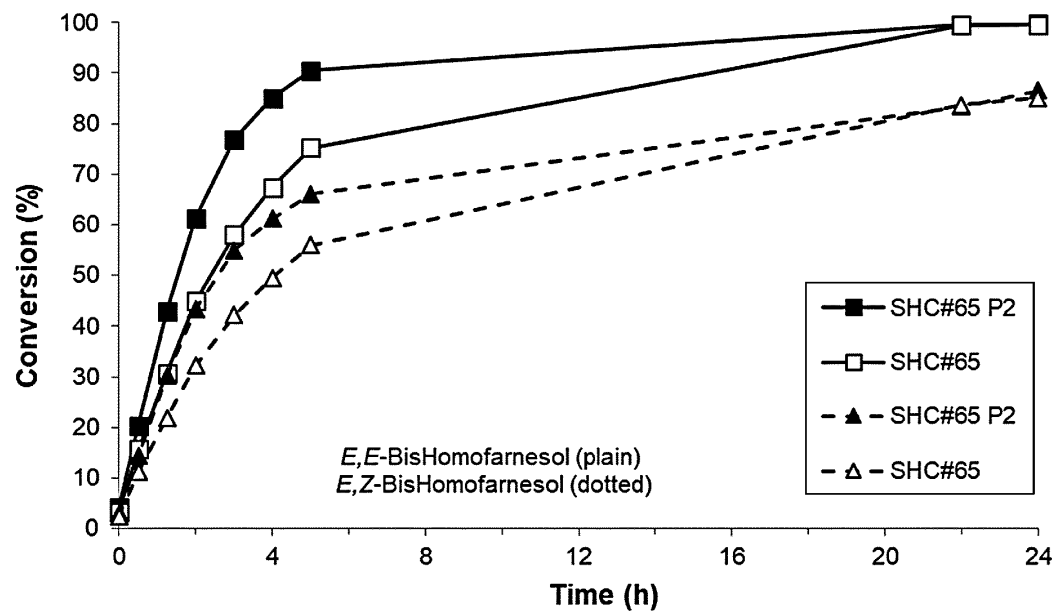


Fig. 11

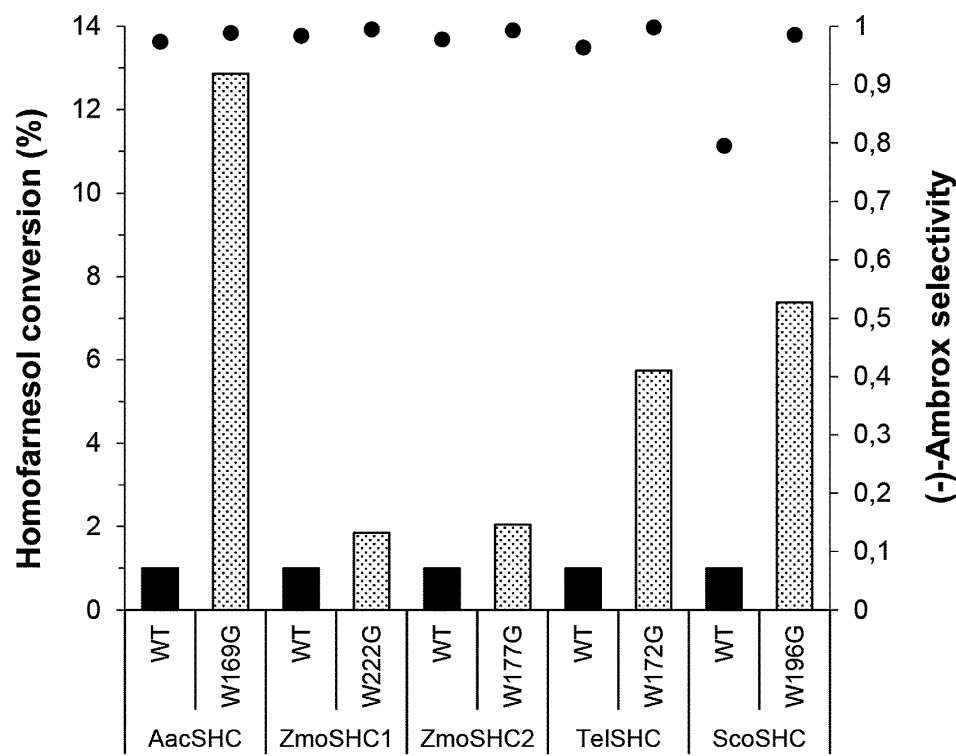


Fig. 12

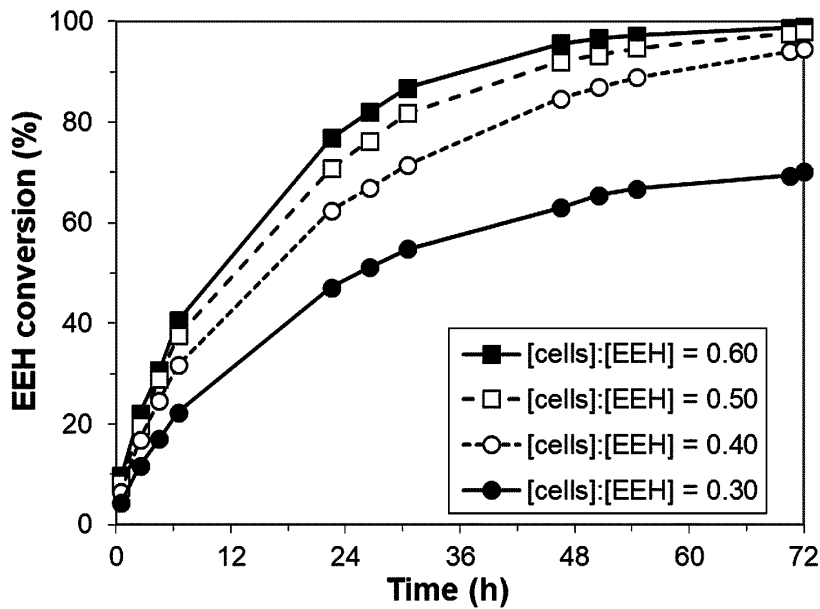


Fig. 13

