

Tco57 ----RIVvcrIQNmeEdKrKqQ0leKtgh----STLNaLMQaigAIRaK-----E-----ttSVFIDYvhtFDSVD--dgcVlkaVvppgVepgVlvacVvrF--Le
Tco51 eswrgffglRlIpsIevdKrQ0LqEq-tgh----STLNaLMQVmgAVraK-----K-----ttSaFIDYvhtFDfVd--dgcVpkaVvppgVepgVlvarVvcF--Le
Tco80 ----KIVALkIPntVKdRrQ0Q0AefKtrr----STLDSLMQVmgSMgQR-----KsgkK----tiIFIDHtRtFDyVg--HsyVvkapvglgVgpgLvacVasL--pe
Tco1 ----QMMLtKngyVrpgLxPQ0SgkKstc----STVDaavQLfGAVgyg----sksgK----tAtlMNYAl--FDSVD--HdgIttaLalkyrg--lLtrwXrpx--Lp
Tco38 ----QMMLtKngyVrpgLxPQ0SgkKstc----STVDaavQLfGAVgyg----sksgK----tvAtlMNYAR--FDSVD--HdgIttaLalkyrg--lLtrwXrpx--Lp
Tco83 ----QMMARtngyVrpgLxPQ0SgFtstc----STVDaavQLfSvSgyg----nkkRk----tvAVYItYahgFDfAd--YdgIttaLalkyrg--lLtrwXrpx--Lp
Tco135 ----RMVArRtngyVrpgLxPQ0SgkKstc----STVDaavQLfSvSgyg----skrgK----kiAtvMNYAReiDSVD--qddVttaLgxsiedlLtrwMrwl--Ls
Tco112 ----QMMARtngyVrpgLxPQ0SgFkStc----STVDaavQLfSvSgyg----skkrK----tiAVYItYahgFDfAd--YscVttaLalkyrg--lLtrwMrwl--Ls
Tco84 ----QMMaQ---gvmMnaKppmQ0SgFkAr---SaVdaVvQLIiivSgyg----sksgK---gatvavIggShkFDpID--HdgIVtaLsrimsd--lLtrw--mr--pl
Tco105 ----QMMaQ---gvmMnaKppmQ0SgFkAr---SaVdaVvQLIiivSgyg----sksgK---gatvavIggShkFDpID--HdgIVtaLsrimsd--lLtrw--mr--pl
Tco79 ----QMMaQ---gvmMnaKppmQ0SgFkAr---SaVdaVvQLIiivSgyg----sksgK---gatvavIggShhFDSVD--HdgIVtaLltyhgf--yfnkmdemt--av
Tco8 ----RMMArgLmNyeDqRlySRQwgFestp----fTaDasIQLvgAVrhe-----gkrgK----piSalVDYAhTfGsvD--HhgVttaLsxrsVnsLtkwVgxl--fs
Tco41 ----LMVArg--llaawissvPQ--SgFKstr----SiVdatVQIvIvSgyg----skkrK----tiAVYItYahgFDfAd--YscVttaLvnvtrt--fnnememF--Ls
Tco97 ----LMVArg--llaawissvPQ--SgFKstr----SiVdatVQIvIvSgyg----skkrK----tiAVYItYahgFDfAd--YscVttaLvnvtrt--fnnememF--Ls
Tco34 ----LMVArg--llaawinsvPQwSgFKstr----SiVdatVQIvIvSgyg----skkrK----tiAVYItYahgFDfAd--YscVttaLvnvtrt--fnnememi--fi
Tco19 ----LMVard--cwprrltavdaQxaYKftr----SvVdaVvQLvsvSya-----nrknKg--givaAtFIyctRtFgsva--YscIittLixhne---dppLtsW--Mg
Tco43 ----paIA---glvnrmeEQlQRSGFRptl----pSID-hfsVs-tVsyg----nekqn---neAtFIDcvhgFDlVdHdHscPitaLg--siedlPttwrr--F--Ls
Tco149 ----paIAx---glvnrmeEQlQRSGFRptl----pSIDsLsVs-tVsyg----nekqn---neAtFIDcvhgFDlVdHdHscPitaLg--siedlPttwrr--F--Ls
Thingi ----RIIAARLrdtVesQLtPQ0SgFRpcc----STLEqLhVraALCRp-----thqsrT---gAVFVDYeKAFDfVD--HdkIareMhrmkVshpIvkwcvf--Ls
ThIX.146b ----RIIAARLrdtVesQLaPQ0SgFRpcc----STLEqLhVraALCRp-----thqsrT---gAVFVDHAKAFNTVD--HdkIareMhrmkVshpIvkwcvf--Ls
Tc507229 ----RIRaarsRgVesQLsPQppglRpn-----SSLQdLhLraAMhcn-----apqhrT---aAVFVGHahAFETVN--HnkIVleMrrlsannhIv-----F--Ls
Tc510783 ----RILvaRIRdVIdpQLtPQRSGlXpnd----STLDqLhLraAMhcn-----apqhrT---atdlVgHAnAFDfVD--HenIILkIrrlsIpnhIvwsaef--Ls
Tc503559 ----RtpAaRIRdVIESQLaLQpScFlpgn----STpDqLhLraAMhcn-----apehrT---aAVFVDYAnAFgTVg--pdaVIlEMrrlsIpnrIarwsac--Ln
Tc511541 ----RtpAaRVRNvIESQstlQpScFlpgn----SapDqLhLsaAMr-----pqhrT---aAVFVDHAdAFgTVg--pdaVIlEMrrlsIpnrIarwsac--Ln
TbI.1 ----KIVcaRIRntVesKlKvQ0SgFstgn----STLDqLhLmaALCRp-----hhddRk---gAVFayYeAFDfVD--HataVraMqemgIptytkwtatl--Lq
Lm11a ----IIsrRLhdhLrdpLQ0PQ0S--vfrphrs-tAdpVr---LlLhkaVRR-----RpgiK---trAVsMDYARTFDALD--H--HttfIatrkkfkapdrLtrwMrwl--Ls
Lm30a ----rmVRDLfLrdpLQ0PQ0S--dlrphrs-tAaplpqgsLhrrsaa-----ltghGq---mrSagclARALGSVD--HgaLtaLkrgfVdplLtrwMrwl--sd
Lm19c ----skLRkRLdEeRppataA--gfpssrIhavglp---lphnaaRr-----QqgtK---taAViVgHARTpDSDVD--Hgt-----LrfrndVphttrImas--La
Lm33b ----rxLRdHvEdKlPQ0S--RfrpqcrcrVapntn---lplrSaARR-----OpgAR---igaALVdnArtlGsvG--Hg-----aeevqrvvptrrImnF--Vd
Lm35d ----tIsrRVRdHegRlQ0PQ0S--gfh---phcStr---nlPglaparsn---papVyrdrsrSagclSRAFDSap--Hgseeaqrsvatyslhhg-----F--Lr
Lbr6a ----IIsrRLdHvEdKlPQ0S--gfp---lhcFTfxtPlrIaphds-----ataaRqrersAgppHARAFg--fd---HttfIatrkkfkapdrLtrwMrwl--Ls
Lbr11a ----VIsrRLcdsVedRlQ0P0xS--gfp---shRSTVdPldlphrVgQR---Rvgl---eigAMFVDHtCAFDSpD--rgaaItvLkrgnpeprytrrVtdF--Vg
Lbr11b ----VIsrRLcdsVedRlQ0P0xS--gfp---shRSTVdPldlphrVgQR---Rvgl---eigAMFVDHtCAFDSpD--rgaaItvLkrgnpeprytrrVtdF--Vg
Lbr11c ----VIqxrCDcaEsQfQa11i--sfh---shraCLD--ywVcfSkKQp---gasp---rprSgilaYahkFhSLD--HriIttvLrefkadhLtrwMrwl--Vd
Lbr34d ----MVsRRLdHvEdKlPQ0S--sfr---srnpTIdpLdLhrVvCq---Opgt---eieeCFMDctSALDlVD--rggVtaLkksIghslLrImyF--sag
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Lm29a ----MVsRRLdHvEdKlPQ0S--sfr---srnpTIdpLdLhrVvCq---Opgt---eieeCFMDctSALDlVD--rggVtaLkksIghslLrImyF--sag
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LITco ----mvlkRLlwwtphphQyayRsmRtTtmqlahlIhevehRnnyhfVqSLPKKsgignQlVhRphrtlVlVDFSKAFDSIDh---rVLSrLlanipgvncrrLrnF--Lc
Tco110 ----ailrQfLrvwVlRthrymcEsihvttvqmtphidsiehdreyfrcSVpsRsgisaQpPhhfvtVlVDFGRALDfDfDf---yVIsVtVpvrVfgyldyktLcni---Lc
Tco116 ----ailrQfLrvwVlRthrymcEsihvttvqmtphidsiehdreyfrcSVpsRsgisaQpPhhfvtVlVDFGRALDfDfDf---yVIsVtVpvrVfgyldyktLcni---Lc
Lbr23a ----ttlaRlfhaRqphlCcxahgrgxAtkmvlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
Lbr27i ----mtlaRlfhaRqphlCcxahgrgxAtkmvlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
Lbr8a ----malmeLfhaQqshlRQahagrdyAtkivlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
Lbr10a ----malteLfhaQqshlRQahagrdyAtkivlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
Lbr14a ----malteLfhaQqshlRQahagrdyAtkivlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
Lbr23c ----malteLfhaQqshlRQahagrdyAtkivlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
Lbr3a ----malteLfhaRq1hlRQahagrdyAtkivlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
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Lbr35d ----malteLfhaRq1hlRQahagrdyAtkivlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
Lbr31g ----malteLfhaRq1hlRQahagrdyAtkivlrsritatveMhrnIhyhvmIqKRpgrgQathRairtlitvVlFRKAFDNMDS---pILakrpgsfpctrLkhwLrnF--La
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Tc510213 ----lvhsRLxvKwhExg-----tsvnvagassraapspslS--rspdRhldcdrhrgrwasvralrapagpssrptlvanhLr
Consensus XXXXRIVAXRVRDXVEXXLLQ0PQ0SgFRpccXXXXXXXXXXSTLdXLMQVXXAVXQ0RXXXXXXVAVFIDYARAFDSVDXXXXXXIIXLXXXXXXVXXLXXXXXXFXXLX

230 240 250 260 270 280 290 300 310 320 330
Consensus
TART-A XRXAQVRVNXXXXXXXXXXXSTLXGVPQGSVLGPlXlXXIXXDSKSLXNlXXX--XLQHGFADDLTIVXXXXXXIXQXXQXXLXXIXSWSKEXXMEVSAEK
nrtfEVkdqag-----eSragqIgaGVpQGSnLGPiLysIfsaDmpLhnyhpsptermIstYADDTiVLSsdilataaRn--EnyLkttfSWSKdVsvNNAK
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Tad1 gRtgsLffDd-----eSrypaITaGVpQGSVLGPlYsIfsaDmpNqnavtgaEveIiatYADDTiVlTktstciveatda-lQeyLdafgeWAVkwnVsINAgK
SART1 gR-----aVvfer-----rgwghkaVScGVpQGSVLGPlLwdVgfdwvLrganl-----gQVvicYADDTiVtargDvrsasil-aaaVatVvArIRKlGLEVA1hK
RT1 nR-----ELvfets-----dgpvtrsITaGVpQGSVLGPlLwntmydgvLdvaLpq-----dcEmvaYADDTiVlLipgIdvnaVKaa-eAeaVasVshWmaQhLQlIAPe
gR--RavIrs-----sgTvevpVTrGcPQGSILGPlLwntmydgvLdvaLpq-----dcEmvaYADDTiVlLipgIdvnaVKaa-eAeaVasVshWmaQhLQlIAPe
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Bilbo sR--QVtaSvh-----dsTvtvltTkGcPQGSVLGPlLwntmydgvLdvaLpq-----dcEmvaYADDTiVlLipgIdvnaVKaa-eAeaVasVshWmaQhLQlIAPe
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Tco114 grTAQVRVg-----sikSEgtqMTcGVpQsSVLGPLlllnavvDLSLKRlDeiq---gMysfFADDLTIicmhaklleIQET--tEkgMdcItSWSEEqfMEAsAER
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Tco157 grTS-----
Tco81 grTAQARVS-----smkSEdieMmfGVPQ-----gfmrrfADDLTIicihatlpvIQET--tdegMdcItNWSEKhyMEVSVr-
Tco5 grTAQVRVN-----rikSEdtqMTyaVpX-----gymrrfpADDLTIicthtllpkIQET--tEkgMdcItSWSEEqfMEAsAER
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Tco90 hr-AQVRVN-----smkSEdieMmcGVPQsGALGPLlllnavvSprKRLdeip---gfmrgfFANDLqMacthtNireIKET--ldkgVdcItRWSEEHYMEVSAER
Tco108 grTAxVRIS-----sikSEdtqMTcGVpLGSVLGslLslIivvvSprKRLdeip---gfmrgfFANDLqMacthtNireIKET--tEkgMdcItNcSEEHYMEVSAER
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