Canis\_lupu ------------------------------------------------------------ Homo\_sapie ------------------------------------------------------------ Pan\_troglo gaagattccaatttagtgtcctccctctgttcatagaacaattcctcaagtccactctga Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ------------------------------------------------------------ Homo\_sapie ------------------------------------------------------------ Pan\_troglo gtagaggctgcatcacaacaaggggattgccctgtctccttccagggctcttaatacaaa Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ------------------------------------------------------------ Homo\_sapie ------------------------------------------------------------ Pan\_troglo ctcttcaactagtaactgaaatgtcaccatgggggatttttctaattggccaaaacctga Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ------------------------------------------------------------ Homo\_sapie ----------------------------------------------------ACAATTAC Pan\_troglo cctggcagggtttggtttgggtgtcttcagatttccttgtcttgaGgTCCTtACAATTAC Rattus\_nor ---------------------------------------------GaTCCTcACAATctC Mus\_muscul ------------------------------------------------------------ Canis\_lupu --------------------------------------GAAGAG-GATGATCCTAAACAG Homo\_sapie TCTACAGCTCAGAACAcCAACTGCTGAGGCTGCCTTGGGAAGAG-GATGATCCTAAACAa Pan\_troglo TCTACAGCTCAGAACAgCAACTGCTGAGGCTGtCTTGGGAAGAG-GATGATCCTAAACAa Rattus\_nor TtgAagaCTCAGgAgAgCAgCTaCaGAGaCcaCCcaGaGAAcAGaGATGccgCTcAgCAG Mus\_muscul ----------------------------------------ccAG-GATGccgCgcAgCAG Canis\_lupu AGtTCTGATTCTGGGGaCCCTCatCCTGACtAttATGATGAGCCCCTcTGGAGGTGAA-- Homo\_sapie AGCTCTGcTgCTGGGGGCCCTCGCtCTGACCACCgTGATGAGCCCCTGTGGAGGTGAA-- Pan\_troglo AGCTCTGcTgCTGGGGGCCCTCGCCCTGACCACtgTGATGAGCCCtTGTGGAGGTGAA-- Rattus\_nor AGCTCTGATTtTGGGGGtCCTCGCCCTGACCACCATGcTcAGCCCCTGTGGAGGTcAAGA Mus\_muscul AGCTCTGATTCTGGGGGtCCTCGCCCTGACCACCATGcTcAGCCtCTGTGGAGGTGAAGA Canis\_lupu -GAgATTGTGGGTGAG-TGCACAcCTGAGGGATatggggactAGaCtAGggAaAaGgAAT Homo\_sapie -GACATTGTG-------------------------------------------------- Pan\_troglo -GACATTGTGGGTGAG-TGCAtgagTGAGGaATGttctCTGGAGCtGAaaAAcAGtAAAT Rattus\_nor CGACATTGaGGGTGAGTTGtgCAgCTGAGGGATGC---CTGGAGCCagGaAATgGGAAAT Mus\_muscul CGACATTGaGGGTGAGTTGtgCAgCTGAGGGATGC---CTGGAGCCGgGcAATgGGAAAc Canis\_lupu tggAAGggGAaAaAGAgAgAA---TGgcAtaAAATAGTgGAGAcTcCtcAAaggtgTTCT Homo\_sapie ------------------------------------------------------------ Pan\_troglo tgAAgGAAaAGAGAGAaAgcgATTTGCagAGAAATtGTaGAGAtTtCctAAgaccccTtT Rattus\_nor CtAcAGAAGAGgGcGAtACAAATTgGCtAAGAtATAa------------------aTcCT Mus\_muscul CcAcAGAAGAGgGAGAtACAA----------------------------------aTTCT Canis\_lupu CAATATTAAGcAAtTCTAAAAttTtTAatcATtCtTCCTTCAGGAAACTAGAGaCCCAAC Homo\_sapie ------------------------------------------------------------ Pan\_troglo CAgTATTAAGAgA-atTAAAAAtTaTAGCtgTtCCTCCTTCAGGAAACcAGAGcCCCAAC Rattus\_nor CAATATTAgacAA-TCTAAcAACTGT-GCgATCCCTtCTTCgGGAggCT----------- Mus\_muscul CAATATgAAGAgg-TCTAAcAACTGT-GtgATCCaTtCTTCAGGAggCT----------- Canis\_lupu CcACTgTcTTtGcTccCtgtgAtgttgCAgAgTtCAtCAAGGAtatTAttccatTTCTAA Homo\_sapie ------------------------------------------------------------ Pan\_troglo CtACTcTtTTtGTTat---GtAtgctTttgtgTtCACtAAGGAcgcTAttcTGtTT---A Rattus\_nor --------TTGGTTggCgaGcACAgCTCAtgATCCACCAA-------ACCATGgTTCTAA Mus\_muscul --------cTGGTT-----GgtCAgCTCAcAATCCACCAA-------ACCATGaTTCTAc Canis\_lupu TctcAGATCCAGTGAatAtAGGcTaGAGaGCTtgATGgCaTTCatTCATGATTaCCTTAA Homo\_sapie ------------------------------------------------------------ Pan\_troglo TAtTAtATtCAGTGActAcAGccTGGAGGtCTctATGtCgTTCcaTCATGATTgCCTcAA Rattus\_nor cAGTgGgTCCAGTtAgGgAAGGATGGAGGGCT------------------------cTgA Mus\_muscul TAGTgGgcCCAGTGAgGgAAGGAaGaAa----------------------------TTgg Canis\_lupu agtaTAGGGAtGTTTCCatgttttgttttgttactaaAAccAAATttgTTTtgTTACTAA Homo\_sapie ------------------------------------------------------------ Pan\_troglo aAAtTAGtGAgGTTTCCat-----------------CAgtggAtaatTTTTtATTAtTAA Rattus\_nor cAggTgGGGtcGTcTCagA----------------------ActTGgTTTTCATTACTA- Mus\_muscul gAAtTgGGagtGTTTCCcA-----------------CgAatAAATGaTTTTCATTACTgA Canis\_lupu AAAg---------tcATGAACTATtgCTCcCAAATGTtTCTGAAaAcaTTtTGAAaCtTT Homo\_sapie ------------------------------------------------------------ Pan\_troglo AAAT---------gTATGAAgTgTcAtTCTCAAATtTCcCTGAAcAacTTtTGAAGCtTT Rattus\_nor -------------------------------cAATGTaTgcGAg---TTTCcGAAGCCTT Mus\_muscul AAATctaatttccaTAattACTATgACTCTaAAATtTCTgTGAg---TTTCTGAAGCCTT Canis\_lupu ctacATGtttTttCTATAGTcTtaCtTGgGGtAAAaAgTTtCATGAATtATGTAtACtAt Homo\_sapie ------------------------------------------------------------ Pan\_troglo TcgtATG--tctCCTATAGTagATCtTGgGGt----cgTTCCATcAATtATaTACtCtA- Rattus\_nor T--------aTACCTgTAGTgTgTtCTaAGGAgAACAcTTCCgTGAATCAcGcACACAA- Mus\_muscul T--------gTACCTgTAGTgTActCTGAGGAAAACctTTCCgTGAATCATGTtCACAA- Canis\_lupu gTAGATAtAAggAAgGgTaTCCtCttCTTTgaCTCAaATTTACACACA---TTTTCAtGC Homo\_sapie ------------------------------------------------------------ Pan\_troglo -TAGATAttAaAAAaGtTGcCCgtttCTTTctCTCAGAcTTACtCACA---TTTcCAca- Rattus\_nor --AGgTACAgCAAAtGcaGTgtaCCCCTT------------------------------- Mus\_muscul --AtATACAgCAAAtG-----CttCCCTTgtgtggtGgTTTcCACACAcctTTTTCAaGC Canis\_lupu TGGGAACTGGCAt--GaGGGGAGTGGGTAtAcaAGcCCAGCtGaaT--AccttTagAcaA Homo\_sapie ------------------------------------------------------------ Pan\_troglo TGGGAACTGGCACaGGTGGGGAGTGGGTAAAgGAGtCCAGCaGgcTgaAtgccTtcAacA Rattus\_nor ------------------------------------------------------------ Mus\_muscul TaGGAgCTGGCcCtGGTGGGaAGTGaGagAAgGAGgtCA--------------------- Canis\_lupu gTCATTcaACCACATGA--------------------CCTCATATaTGTCAttcaggAAt Homo\_sapie ------------------------------------------------------------ Pan\_troglo aTCATTTTACCACATGgTCcTcacttacTctcAgctgCCTCATATGTGTCAcCTC--Aca Rattus\_nor ------------------------------------------------------------ Mus\_muscul -ctATTTTACCcgAcGATCtTagtggttTtggAt---ttcCtcAcGTGTCAaCTC---Ac Canis\_lupu AATAATtAAATCAAATAtGTATtTAGAAAtatTTTtccAATAaTGtAAACAtatccatgt Homo\_sapie ------------------------------------------------------------ Pan\_troglo AATAATCAAATaAAATggGcATGTAGctAAgCTTTgTAAATAGTGAAAACA--------- Rattus\_nor ---------------TgtGTATaTgGtAAAcCccTtTtgcTgGgGcttACA--------- Mus\_muscul AAgtgaCAAgTCAAATAaaTATGTAGAtgtgCTTTaaAAATAGTGAAggCA--------a Canis\_lupu CaaTGatcaTaCtTGtTTcTTAacTGTTTCTATTACAGGTgTgagTTAAttTTTTaATTT Homo\_sapie ------------------------------------------------------------ Pan\_troglo ---TGGaTGTcaaTtGTTtTTAcaTaTTTCTATTACAGGTaTagcTTcAcaTTTTtcTTT Rattus\_nor ------------------------------------------------------------ Mus\_muscul CgcTGGgTGggCcTGGcagTgcttgGcagtaAcTACgGt-----gcTAAggTgcccAagc Canis\_lupu AatttAATTcTaGGATggTTaAccTaTAcgTTTCtagtGTAcAgtATAgTGaTtcAAcAA Homo\_sapie ------------------------------------------------------------ Pan\_troglo AGcAaAA-TaaGGGATCcTTttagTtTAaAaTTgagAaGTAgAaaAaATTGgTAaAtTAA Rattus\_nor ------------------------------------------------------------ Mus\_muscul AGgAggATTgTGaGtTCaaggAtagcctgATccCctAgtgAgAtcATgTctcaAgAATgt Canis\_lupu tTCtATaCATTAcTcAgTGCTcATCAAgaTAAATGtaCTtTTtTTCTTTTaAagatTTtT Homo\_sapie ------------------------------------------------------------ Pan\_troglo ATCatTTtATTctcAAAT---TATCAAcccAAATtaCCTgTTCTTCaccTcATCtAaTAa Rattus\_nor ------------------------------------------------------------ Mus\_muscul ATCcATTCATTAgTAAATGCTT-------TAAATGcCaTcTTCcTCTTTcttTCcATTAT Canis\_lupu AtTTATtTATGAgaAAcAcaGaGAgAGAggcAGaGACaTAgaCaGaggGagaagcAGgCT Homo\_sapie ------------------------------------------------------------ Pan\_troglo AGTccTaTAaaAAgAAaAgcGgGcCAGAcaAgGtGgCtcAtGCctgtaaTcCcAgcactT Rattus\_nor ------------------------------------------------------------ Mus\_muscul AGaTAccatTGAAcAtttttGtaACAaAgtAAGgaAtgTgaGCtGcctGTtCtAtAGgCc Canis\_lupu cccTgTGggGAgcCtGatGcAagAcTcAAtCtcaGGACCCCAAGAttATgaTctgagctg Homo\_sapie ------------------------------------------------------------ Pan\_troglo tgggAgGccGAagCaGgaGgAtcAtTtAAgCctgGGAgtttgAGAccAgCcTgggCAACa Rattus\_nor -----------------------------------------------------cACgACC Mus\_muscul attTAT------------------------------ACCCCAtGAagtTCtgtaACAACC Canis\_lupu aAGGCAgAC----GCTCaACCAAtgAgccaccacccatgtgcctccAAgATAAAtgTatt Homo\_sapie ------------------------------------------------------------ Pan\_troglo tAGcaAgACctcAtCTCtACCAAaaAa------------------tAAaATAAAaaTtag Rattus\_nor CAaGCAAgCgCAAGCTCCg----------------------------------------- Mus\_muscul CAGGCAAgCaCAAGCTaCA----------------------------------------- Canis\_lupu CttAatCccctaaCcTgTttCaGccaTGCCCCCCAgtCActtatCctCcGgtaaAcaAca Homo\_sapie ------------------------------------------------------------ Pan\_troglo CcagGCaTGgtGgtgTgTGCCTGTGgTGCCagCtACtCAgaaggCtgCaGtgggAggAgc Rattus\_nor -gGAGCCTGtGGCCcTCTGCCTGTGtTGCCtCCCtCCC---------------------- Mus\_muscul -gGAGCCTGtGGCCtTCctCCTGaGcTGCCCaCCtCCC---------------------- Canis\_lupu gtTTGttcCCtacAatT------------------------------------------- Homo\_sapie ------------------------------------------------------------ Pan\_troglo acTTGagtCCaggAggTggaagctgcagtgagccatgatggcaccactacactccagcca Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ------------------------------------------------------------ Homo\_sapie ------------------------------------------------------------ Pan\_troglo aggcaacagagagagaccctgtctcaaaaagaaagaggaaagaaagagagaaaggaagga Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ------------------------------------------------------------ Homo\_sapie ------------------------------------------------------------ Pan\_troglo aagaaggaaagaaggaaggaaggaaggagaaagggaagggaggaaggaaaaaagaaagaa Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu -------------------aagAGtgtAttTTtgTTtCTTttgtTtcTttgtTtCTtTGt Homo\_sapie ------------------------------------------------------------ Pan\_troglo agaaagaaaacggaaggaaggaAGcacAgaTTaaTTaCTTggtcTctTagtcTcCTcTGc Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu tTTctTtcTtaAatTCCACACAtCaCTGAaATTatgatagTTgtcTTtctCtgaatgttt Homo\_sapie ------------------------------------------------------------ Pan\_troglo cTTtgTcgTccAtcTCttCcCACCtCT----cTtCAtgcaTTcctTTctcCct------- Rattus\_nor --------------TCCACACtCCGCTGACATgCCg------------------------ Mus\_muscul --------------TCCACACtCtGCcGACATTCCA------------------------ Canis\_lupu aTtTCgCtTaCCAttaCaCgCtCTAgCTCCtaccacattgtgcaaaaggcaagatttcat Homo\_sapie ------------------------------------------------------------ Pan\_troglo -ctTCCCtTtCaggATCCaTCtCTggCTCC------------------------------ Rattus\_nor -TcTCCaCTctggatcCCCTCCtTAAtgCC------------------------------ Mus\_muscul -TgTCCtCTgtCAtATCtCTCCtTAACTCC------------------------------ Canis\_lupu tctttttatgactgaaaaAtAtTCcaTTgtACAtaTatatcatatcttctacaAAgAGtA Homo\_sapie ------------------------------------------------------------ Pan\_troglo ------------------ctgCTCcTTTAtAgAgaT----------------GgAcAGtg Rattus\_nor ------------------ACAaTggTTTACACAccT----------------GAAtAGGA Mus\_muscul ------------------ACgCTgtTTTACAggcgT----------------GAAtAGGA Canis\_lupu GgTTTGTAAcAATcAAAGTaGAAAAacCAAgcAGccTTAAgAggGGAAGTGAAAtGGAgc Homo\_sapie ------------------------------------------------------------ Pan\_troglo GgTTTGTAA-AAcAAAAGTTGAAAAGTCAgATAG--TTAAAAggGGAAGTGAActGGAa- Rattus\_nor aCTTTGTgA-AATAgcAGTTGAAAAGTtAAATgt--TTgAAACAGGAAGTGAAAGGag-- Mus\_muscul GCTTgtgtAaAATAgcAGTTGAAAAGTCAAATgt--cTgAAACAGGAAGTGAAAGGGg-- Canis\_lupu atacTCTAAttTTcAACATCtTTGTtAg---CCATGagTGtTCCCATcCtAAtTTaaTTt Homo\_sapie ------------------------------------------------------------ Pan\_troglo --ggTCTAAacTTtcACAaCCTTaTtAA---CCgTGGCTGCTCCCATTCtgAtTTTGTTc Rattus\_nor -----------TTgAgCgcCCTTGTgAAggggCATGGCTGCTCtCtTTCCAgCTTTGTTg Mus\_muscul -----------TTgAgCgTCCTTGcaAA---gagTGGCTGCTCtCtTTCCAgCTTTGgca Canis\_lupu GGtcAGGGAAGTtTgcCtCACtttgCCAGAgaaCT------------------------- Homo\_sapie ------------------------------------------------------------ Pan\_troglo aGcagtGGAAGTtTCaCCCtCtCCTCCAGAgcGCT------------TGGCTTCTTTGTt Rattus\_nor GaAagGaGAAGTCTagaCtcCgaCTCCAGgcaGgT------------TGGCTTCTTTGTC Mus\_muscul GGAgAtGGAAGTCTCaCCtAtcCCTCatGgagGgTgggtgggggtggTGGCTTCTTTGTC Canis\_lupu tCtAATTTCC-TTCTTCAACaTCAtgCCAGAaCAtCtTggTCAGGCtcaaCTtATCCAGt Homo\_sapie ------------------------------------------------------------ Pan\_troglo CCaAgTTTCCtTTCTTCAACcTCACACCAGAGttCCCTggTCAGGCtTGgCTcATCCAtt Rattus\_nor CCCAATTTCC-TTCTTCAgtgTCACACtAGgGtgCCCcAATCgGGtGTG--------AGC Mus\_muscul CCCAAT-----TTCTTCAgtgTCACACtAGgGCACCtTAATCtGGtGTG--------AGC Canis\_lupu AaGCACAGTG---------CcaAGGgcCtATgAtgCTtctAGGgCACcatAAAATgTTtt Homo\_sapie ------------------------------------------------------------ Pan\_troglo AGGCACAaTGtGgGCAGTgCaGgGGAcCCtccAtACTGtAAaGCCACaTGAgAATgTTtt Rattus\_nor AGGCACAGTGGGCGCgGTTCTGAGGAACCATagAACTGgAgGGCtgCgTGAAAATATTCC Mus\_muscul gGGCACAGTGGGCaCAGTTCTGAGGAAC-ATatAACTGaAgGGCtACaTGAAAATATcCC Canis\_lupu AgtTTCTTcTAAAATTAGA------AgAAATG-AAcTTatgAGGTagAgGAAAATGtTTT Homo\_sapie ------------------------------------------------------------ Pan\_troglo AACTcCTTTTAAAATTAtAA-----AAAAATG-AAaTTgtAgaGcCTAAGAAAATGtTTT Rattus\_nor cAtTTCTcTTtAAcTTAGAAgggggAAAggTGgAAaTTtCAAGGTCTgAGAAAAatgcTT Mus\_muscul tACTTCTTTTtAAtTTAGAA-----AAAAgTGaAAgTTtCAAGaTCTAAGAAAATGcTTT Canis\_lupu AAtTTTTAATTCAaCCTggATTAtATTTaTCTTTATACCAATgCAGTCAcAAAgTgTGAt Homo\_sapie ------------------------------------------------------------ Pan\_troglo AACTTTTAATTCAGCCTAgATTAtA-TTgTCTTTATACCAATtCAGTCATAAAATATaAt Rattus\_nor tgaTTTTAATTtAGCCTAcATTACATTTtTCTTatT----------------AATATGAC Mus\_muscul gAC-TTTAATTtAGCCTgtgTTACATTTtctTaTAT------------ATAgAATATGAC Canis\_lupu TTctAATATTTT-ATgAgGaAAGGGaCC--------CAAtAGTGatTaGG-CtCACgaGT Homo\_sapie ------------------------------------------------------------ Pan\_troglo TTTCcATATTTTtATggAGGAAGGcgtCcacacAAgCAAgAGTGCtTGGGGCtCACatGT Rattus\_nor TTTtAAcATTcTCATCAAGtAAGGGtCC-----AAAgctAAaTGCATGGGGCACAtaGGT Mus\_muscul cTTCAATATTTTCATCtAGGAAGaGcCC----aAAAgctAAGTGCATGGGaCAtACcGGT Canis\_lupu CAtAcgaCAGCCtTGAcCActGCTGAt--TaAgTTcCgTAtGGTTtgaCTAgCTcTgTGT Homo\_sapie ------------------------------------------------------------ Pan\_troglo CAgAAcGCAaCCCTGATCATgGCTGAtCCTGgCcTTCgTgtGGTTCTGCTAaCTaTgTGc Rattus\_nor -----------------CATtGCTGgCCCcGACTgTCATAAGGTTCTGCcACCTgTCaGT Mus\_muscul CccAAtGCAGCCCaGgTCATccCTGACagTGACTTTCAcAAGGTTCTGCagCCTtcCcaT Canis\_lupu CtaTCAacCTccacTCaCCcAAATgTCtgTGatCtTtgAgAATAGCAAttgatAtTCAAT Homo\_sapie ------------------------------------------------------------ Pan\_troglo CtgTCAgtCT----TCCCCAAAATCTatgTGGtCCTCAAAtATAaCAActgTCAtTCAAT Rattus\_nor CA------------TCCCCAAcgTCTCCATGGGCCTCAAAAcTAGCAAgCATCACTCAAc Mus\_muscul CA------------TCCCCAAAgTCTCCAcGGGCCTCAAAAtTAGCAAtCAcCACTCAAT Canis\_lupu ACACACT----------TTTGAGCAaaCAGtgAGaTtAattTtggGGATtCAAAG----- Homo\_sapie ------------------------------------------------------------ Pan\_troglo ACACAtg----------TTTGAGCAcCCAGtgAGcTAAgttTtAAGGATtCAAAGatgaa Rattus\_nor gCtCACTtTGTAAAGCgTTTGctCAgCtAGgAAGTTggtGCTGAAGtATAtcAAa----- Mus\_muscul ACtCgCTcTGTAAAGCaTTTGctCAgCtAacAAGTcAgtGCTGAAGtATAtAAAG----- Canis\_lupu ---------------------------------------------------------AtG Homo\_sapie ------------------------------------------------------------ Pan\_troglo aagtCaTGCTGtCTcCCCtgCAGaGgGTGctcAGACTAGTGAtGGAAACAGtatgggAtG Rattus\_nor ----CCTGCTGCCTgCCtC-tAGGGAGTGgGTcGACTtGTGAGGtAggCAGATC--AAGG Mus\_muscul ----CCTGCTGCCTgCCCC-CAGGGAGTGgGTAGACTAGTGAGGGAAACAGATC--AAGG Canis\_lupu AAgGAAAGCAGAAgGaatAT--------------cGCTGAGCAGaACtaTGGACCCAGCT Homo\_sapie ------------------------------------------------------------ Pan\_troglo AAAGAAAGCAGAA-GGCCgT--------------TGCTGAGCAGG-CAGTGGACtCAGCa Rattus\_nor gcAGgAAGCAGAAAGGCCATTGTGTgtgtgtgtgTGtgGAGggGGAggGTGGACCCAGCT Mus\_muscul tcAGgAAGgAGAAAaGCCATTGTGT------------------GGAgAGTGGACaCAGCT Canis\_lupu GAGGCtgAAAaTAcAgAAGTGAaTCaGTTCCAGtcaGccatgtaGTGtgaTgtTCAtCAA Homo\_sapie ------------------------------------------------------------ Pan\_troglo GAGGCtgAAACTATACAAGTGAcTCgGTTCCAGCtGGa---------------------- Rattus\_nor GAGGgCAgAACTATAg--------------CAGCAGGagGCAGtGTGgAGTCCTCAGtgA Mus\_muscul GAGGgCAAAACTgTAC--------------CAGCAGGggGCAGcGTGcAGTCCTCAGCAA Canis\_lupu CAaaTGgtGCCttGGAcAAGCACCAAATGgAAAGAAtaATTGCATAtAcTC--------- Homo\_sapie ------------------------------------------------------------ Pan\_troglo ----------CCAGcAggAtaACCAgATGAAAAGAAgGATTGCATAtATTCcatatatat Rattus\_nor CACtTGtGGCtCAGGAtAAGCgCCcAcTGAAgtGcAc-AcTGtgTACATTC--------- Mus\_muscul CACcTGaGGCCCAGGAcAAGCACCtgcaGAAgtGAAcGA-TGtgTACATcC--------- Canis\_lupu --ATGtTTGAAAAAGgAacC-AAggGaaCcAagGATAAaGGcTAgAGGA------TgcaG Homo\_sapie ------------------------------------------------------------ Pan\_troglo ttATGtTTGAAcAAagAGTC---AAGGTtTATTG---------cAAGGA------TAAGG Rattus\_nor --ATGGTTGgAAAAGAAGTCGAAgAGGTtTATTaAcAATGGaTcAgGGAgtttttgAAGG Mus\_muscul --AcaGTgGgAAAAGAAGTCGAgAAGGTCTATTGATAATGagTAAgGGA----------- Canis\_lupu AGGgTTTGATGGAGggCctTtaagTa------------AtcACCAAggAgGGgGGCgggt Homo\_sapie ------------------------------------------------------------ Pan\_troglo AGGCTTTGtTGGtGgcCTGTt-----------------AAgACCAtCCAgGGtGGtCAtA Rattus\_nor AGaCTTTGAgGGAGAagTtgGctATGggggTtgCaaATAAcACtAACCAAGacaGCCAcA Mus\_muscul --GCTTTGATGGAGAggTGTGgcATGttatTgaCtgATAAtACCAACCAAGGtGGCCAcA Canis\_lupu CatGcTgGGcAAGGAAGaGAgttGgAtGAGGcAtAGAtAAAtcTGgAaAGCaA------- Homo\_sapie ------------------------------------------------------------ Pan\_troglo CTGGaTaGGgAAGaAgGtGAgctGgAAGAGGgAtAGACAAACtTGgATgGCCA------- Rattus\_nor CTGG--------------GAagGGtcAGAGGagCAGtCgAACgTGAAT------------ Mus\_muscul CTGG---------GAAagGAcaGGccAGAGGagCAGtCAAAtgTGAATAGaCAgacagac Canis\_lupu ---GAcATTGgGAtgGAGGcGtT--GGAGGTtATAGTGaAGcCAAAAAaATgTTcAaTgA Homo\_sapie ------------------------------------------------------------ Pan\_troglo ---GATgTTGAGAtgGAGGaGCT--GGAcGTCATAacGtgGTCAAAAACATgTTgA-TgA Rattus\_nor ----------AGACAGAGGgtCTggGGgGGTCAcAGTGCAGTtggAAgCcgATTaATTAA Mus\_muscul aggGATAgatAGACAGAGagGCT--GGgGGTCATAGTGCAGTtggAAgCcTATTaATTAA Canis\_lupu gACtAaTTAaCTgaAAtGTTGcTAAC-cAAACAGAAACtTCCAaAAggaATT---GGAGG Homo\_sapie ------------------------------------------------------------ Pan\_troglo gAggAcTTAtCTacAAaGTTGtTAACtTAAgaAGAAACCTCaAGgATtgATTttatGAtt Rattus\_nor AAC------------------------TgAACAGAAACCTCCAGAgTAcA-----GGAGG Mus\_muscul AAC------------------------TgAgCAGAAACCTtCAGAgTAgA------GgaG Canis\_lupu tacCCAGgAAgtCtgAAAAgA-------tAg----------CTTtgTTTCAaGGAG---- Homo\_sapie ------------------------------------------------------------ Pan\_troglo tCTCCAGgAAgtCctAAAAgA-------tAa----------tTTCATTTCAGGGAGAAAA Rattus\_nor GCTtCAGCAAACtgAgcAAaAtgAcagCCAc----------CTTCATTTCtGtGAGgAAA Mus\_muscul GtTtCAGCAAACtgAAAAAcAacAgccCCAacaacaacagcCTTCATTTCtGtGAGAAAA Canis\_lupu --AcACACCCCtA----aaAAggcCaAGGAACATacAAGAAgAATGTgCTTtGGTTTGac Homo\_sapie ------------------------------------------------------------ Pan\_troglo acAacagaCCaCt----GCAAagACCAGGAACATGAAAGgATAATGTagTTtGGTTTGcT Rattus\_nor GgAgACACtCCCAccccGCcAtCAttAGGgcCATGAgAGgATg--GgcCcTAGtTTTGgT Mus\_muscul GgAgACtCCt-------GCcAtCcaCAGGgcCATGAgAGAATAggGTagTTAGtTTTGtT Canis\_lupu TGGCagatgAGAtAtTTGcagAGgAaGTgGGAgCaTAAgaCTGctgcTgTt--CCctgCA Homo\_sapie ------------------------------------------------------------ Pan\_troglo TGGC-----AGAtACTTGTGaAagAtGTtGGACtGTAAggCTGtcaaTaTcctCCtcgCA Rattus\_nor TGGC-----AGtCgCTTGTGCAGAgCt---GACCGTAA---------------CtcgCCc Mus\_muscul TGaC-----AGtCAC-TGTGCAGAACGccaGgCtGTAAc--------------ttgcCCA Canis\_lupu ggACTCACCACAGCgtAcTgTAT-----tTGTtCCTgtACTcACttgACTCTCCCACCAc Homo\_sapie ------------------------------------------------------------ Pan\_troglo gaACTtACtACAGtAtATTgTAT-----CTGctCCcttACctACCtgACTCTCCCACtAT Rattus\_nor aCAgTCctCACAGCACcTTATgTGCACgCTGTCtgTcGACTggaaCcgCTgTCCt--tgT Mus\_muscul cCgCcactCACAGCtCcTTAcATGCACtCTGTCtgTtGACTgACCCtgCTCTCCtcaCAT Canis\_lupu gCAaTAAacTCCtTGAaGACAGAaaCCATG-CTGATgGGTGTTTGACTCCcTGctCctCA Homo\_sapie ------------------------------------------------------------ Pan\_troglo TCAgTttgtTCCtTaAtGgtAGA--CCATGCCTGATcGGTGTTTtACaCaTc---Ccctg Rattus\_nor TCACcAAccTtgGTGACtAtgGAGGCCg-GCCTGgctGGcGaaTtACTCCTTGAaCAgCA Mus\_muscul TCACTAgggT-gGTGACtgCAGAGGCag------------GccTGgCTCCTTGAgCAgCA Canis\_lupu tgATGTCTGACATcTTGCTGATGtTCAgtAAATGAgGAAgAgcAtAAggAggAaATGaTA Homo\_sapie ------------------------------------------------------------ Pan\_troglo CTATGTCTGAtAc-TTGtgGATGCTCAgaAAgTGggGAAggAAgGAAAgAtAcgATGgTA Rattus\_nor CTAaGTCcGACAT-TTGCTGAc-CTCAACAAATGAAGgAAgAAAGAtACAAAACcT---A Mus\_muscul CTAccTCTGACAT-TcGCTGgaaCTCAACAAATGAAGgAAAAAAGAtACAAAACtT---- Canis\_lupu AAAAagCTcAcATATcT----------------CTTtACaAaAt-TtTcTAgTTaGgCTC Homo\_sapie ------------------------------------------------------------ Pan\_troglo AAAgg-CTtAcAcATGT----------------CTTGACcAgAa-TGTTcAgTTtGgCTC Rattus\_nor AAAAcACcAgAATcTGTGCCTTGCcGgTatTTACTTGACgAtgG-TGTTTACTTGaCaTC Mus\_muscul -AAAtACTAgAATcTGTGCCTTGCtGaTgcTTACcTGACgAtAGtTGTTTACTTGGCtTC Canis\_lupu A-ccGGGTggAGTCATACt-----GCtGCCATTCTaCttTGGCAtCCTtgcAaAA-tgTA Homo\_sapie ------------------------------------------------------------ Pan\_troglo ATTTGGcTggAGTCATACtgcaTGGCtGCCATTCTgCtcTGGCAtCCTcagAgAAgCATA Rattus\_nor cTTTGGGTcC-GTtgTctGCACTGGCgGCCcTTCT-CCgTGGCgGCtcaCa-----CgTg Mus\_muscul cTTTGGGTtCgGTtgTctGCACTaGCaGCCATTCc-CCgTGGCAGCtTgCa-----CATg Canis\_lupu CTgtCCATttGAaGAgAAggGCcacAgTTtACCAgGAgTCctAAaGTgatagaAAtGcAa Homo\_sapie ------------------------------------------------------------ Pan\_troglo CcgcCCATtaaAGGA-AAAaG-----------CgtGAATaTaAAtGTtgaGtcAgAacAC Rattus\_nor CTCACtgcCtGAGGA-AAAcGCTTTAATTCAaCAcGAgTCT---------GcgAAAGAAC Mus\_muscul CTCACtgTCgGAGGA-AAgtGCTTTAATgCACCAtGAATCT---------GcaAgtGAAC Canis\_lupu ctCAGA-ATTagGTTAgggggTTacaAGGgAAAAAAAccccAcgAGgGaTGgGGAgTGAC Homo\_sapie ------------------------------------------------------------ Pan\_troglo tgCAGAcATTtAGTaAcctccTTcagAGGAAAAAAAA------AAGgtGgGgGGAaTGAC Rattus\_nor AttgGt-ATTGAtTTA------------GAAAAAgAA----ATAAGAGGTGAGGttTtAC Mus\_muscul AcCAGt-gTTGAtTTA------------GAAAAAAAg-----TAAGAGGTGAGG-tTGAC Canis\_lupu AGAAAtcTAAAATCtAATgAAtgtTCCATTT--TgTAcTtCtGAtG-AATCAagtGCtCc Homo\_sapie ------------------------------------------------------------ Pan\_troglo AGAAAtccAAAAaCtAgTAgAGctTCCAcTT-TTTcATTtCAGAAGAAATCAGttaCtCt Rattus\_nor AGAAgCATgAAATCCAATAAAGtCTC------gTTTATTCCAGAAGAAATCAGAAGaCCa Mus\_muscul AGAAgCATgAAgTCCAATAAAGcCTCtATTTcTTTTATTCCAGAAGAAAcCAGAAGgCCg Canis\_lupu CCtCtgAGGAttACcAtTgtTAACAAgAgaacttggtggctcctgggtggctccattggt Homo\_sapie ------------------------------------------------------------ Pan\_troglo CCtCtaAGGACCAttACTAtTAACAAaA-------------------------------- Rattus\_nor tCCCGtgGtcCCtCAgCTAAgg-------------------------------------- Mus\_muscul CCCtGtgGGtCCcCAgCTtATg-------------------------------------- Canis\_lupu taagtgtctgcctttggctcaggtcatgatcccagagtcctgggacagagccccaagttg Homo\_sapie ------------------------------------------------------------ Pan\_troglo ------------------------------------------------------------ Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ggctacctgtggggagcatgtttcttcctttccctctgctgcctcctctgcttatgctct Homo\_sapie ------------------------------------------------------------ Pan\_troglo ------------------------------------------------------------ Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ctccctctgtcaaataaataaataaaatcttttttaaaaaggaacCAGAgACcTT----- Homo\_sapie ------------------------------------------------------------ Pan\_troglo ---------------------------------------------CAGAgAC-cTTAGAa Rattus\_nor ---------------------------------------------CAGgAAC-TTTAGAC Mus\_muscul ---------------------------------------------CAGgAACtTTTAGAC Canis\_lupu AGgAGtATTgTTtAtTTTttAtAaACTTTtTAAcaccGTtgCTGTcCTtGTcATACTCTT Homo\_sapie ------------------------------------------------------------ Pan\_troglo gGAAGcATTaTTtAtTTatCAtAtAtTTTGTAATGtTaTtACctTTCTtGTTATACTCTT Rattus\_nor gGAA--------CAGTcTCCAC----------ATGgTGcCgCTGTTCTCtTTcT------ Mus\_muscul AGAA--------CAGTTTCCtCAcACTTTGacATGaTGTCACTGTTCTCtTat------- Canis\_lupu TCTTATACCCTAaaATaGTTA--AGAAAcTcTTTTAgAagAATAcaATCCTtCgTGCTTT Homo\_sapie ------------------------------------------------------------ Pan\_troglo TCTTATACCCTAccATtGTTAgcAGAAAtTaTTTTAaAttAATAAGATCCTgCATGCTTT Rattus\_nor -----------------------------------------ATAAGtTtCTAtgTGCTTT Mus\_muscul -----------------------------------------ATAAGggtCTAtATtCTTT Canis\_lupu T---TTTGaCAAAATAAgaagaagcagaagaaggcgcaggagagaggaggaagaaggaag Homo\_sapie ------------------------------------------------------------ Pan\_troglo TCCtTTTtctAAAAaAA------------------------------------------- Rattus\_nor TCC-TggGTCAgAATAA------------------------------------------- Mus\_muscul TCCaTTTGTtAAAATAA------------------------------------------- Canis\_lupu gAAgGAAgcatTACCTCTGcaGAAAATattCtgcTCTGAaCCAGTCCTGgGgGGAgAGcA Homo\_sapie ------------------------------------------------------------ Pan\_troglo gAAA-------gAtCTCTGTGtAgAATGtCCtgTTCTGAgCCAGTCCTGAGAGGAAAGgA Rattus\_nor AtgAGAAcgcCTcCtTgTGTGGAAAAgGCCCCtTgtT--------ttTGAaAGaAgAGaA Mus\_muscul AtgAGAAagtCTcCtTgTaTGGAAAATGCaCCcTTtT--------------AGGAAgGaA Canis\_lupu AtcAAtgT---ATgTGTTATTAACTGATGAAgGAAttA----AGAgAtAAAACtgAtgAA Homo\_sapie ------------------------------------------------------------ Pan\_troglo AgTAtAATca-ATtTGTTATTAACTGATGAAAGAAttAacTGAaAgAtAAAcCtTAggAA Rattus\_nor AATgtAATaggATaTGTTAaaAACTGATGggAGAtCAA--TtAGAcACAAAACCTAAccA Mus\_muscul AATAAAATgtaATtTGTaATTAAtTagTagAAGAtCAA--TGAGAtACAAAACCTAAtAA Canis\_lupu GcAgAGagAA---GtTaAgTGAATtTcTGAtAAAGgAAGCTATa-gCCaTGATAAtTtAT Homo\_sapie ------------------------------------------------------------ Pan\_troglo GcAgAGGgAA--------gTtAATCTaTGACtAAGAAAGtTAagTaCtcTGATAACTCAT Rattus\_nor GAgAAGGAAATcTGaTGACTGAAcCTTTG-CAgAcAAAGCTtcCTCCC------------ Mus\_muscul GAgAAGGAAATaTGcTGACTGAATCTTTGA-AAAGAAAGCTcTCTCtCtctcTctCTCtc Canis\_lupu TCATTCCTTCT-------------------------------TtcATTtcaTTGTAA--T Homo\_sapie ------------------------------------------------------------ Pan\_troglo TCATTCCTTCT-------------------------------TtTATTCAtTTacAt--T Rattus\_nor ------------------------------------------TcTgcTCAGTTGTAAGCT Mus\_muscul TCtcTgtgTgTgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgTgTgTTtAGcTGTAAGCT Canis\_lupu AtTT-ATCATAAGtCtACTGcGTACCAGGtgcTGAgCtAcaCAcaCgGGaAgAGCAGcAg Homo\_sapie ------------------------------------------------------------ Pan\_troglo AtTTaATCAcAAGtCtAtgaTGTgCCAGGCAcTcAggAA-----------ATAGtgaAAA Rattus\_nor ACTTGgTC-TgAGCCatCTGTGTACCAaaCAgTGgACAAgGCAgTCAGG-ATAGCAGAAA Mus\_muscul ACTTGgct-TgAGCtgtCTGTGTACCAGGCAtgGAACAAgGCAgTCAGG-ATgGtAGAAA Canis\_lupu caAGACtgttGtaATTgtgCtCTcAcGgAGCAtAcACgAtAGtGGaAAAGcAgagcgtaT Homo\_sapie ------------------------------------------------------------ Pan\_troglo TtgGACACGCGatATTCtgCCCTTgTGtAGCACATACtgtAGtGGGAAAGaAagtgcacT Rattus\_nor TCAaACACGCGGCATcCCACCgTTgTGcgGCgCgTgtcACAGgGGGAAAG---------- Mus\_muscul TCA---ACaCaGCATTCCACagTTATGtAGCACgTgtcACAGaGGGAAAG---------- Canis\_lupu TcTgACTGGAcAACtACCAACACgGAgAGAG---AGGggGCAGGtGCtG-GGAAACgTgC Homo\_sapie ------------------------------------------------------------ Pan\_troglo TtTaACcGGAcAACtAtCAACACg--AAGAGGGgAGGAAGCAGGGGCtG----gAaATgt Rattus\_nor ----ACaGGAgtgtAACCcACACtGAgAGtGGtAgGGAAGCgaGGGtGGTGGAAAtgTAt Mus\_muscul ----ACTGGAttgtAAtCcAtACc--AAGtGGGAgGGAgGaAtGaGtGGTaGAAACAaAC Canis\_lupu CtAAAGACTgTGCCAAggATGAAGCTCgTAATATTTGTttGcccaCAGttTgTTCTgTCA Homo\_sapie ------------------------------------------------------------ Pan\_troglo CCAcAGACTtTGCCAAagAcaAAGCcCATAATATTTGaAAGt---CAGttTcTTCcATCA Rattus\_nor CaAA----------AAcAATGAtGtTCATggTAcTcGTcAG-----AGCATtTTCTATCc Mus\_muscul CCcA----------AAaAATGAAatTCgTggTATTTGTAAa-----AGCATtTTCTATCA Canis\_lupu cTTgGTTgAATAAggTTCTTTT-CTCCctCTGTTTTCtgC-TTCCtgCTcctCACCcctg Homo\_sapie ------------------------------------------------------------ Pan\_troglo tTTTGTgTAtTAAggTTCTTTa-tTCC-CgTGTTcTCCgCcTTCCtgCTtgtCAtCTtcA Rattus\_nor gTTTGTTTtAaAACATTCTTTTcCTCtTCCTGTTTcCCACTTTCCCACcgtCCACCTAAA Mus\_muscul gTTTGTTTAATAACATTaTTTT-tTCtTCCTGTTTTtCAtTTTtCCACTatCCACCTAAA Canis\_lupu CTgcTCAGCTGACCAtGTTGCCTaCTAcGGcATAAATGTcTACCAGTCTTACGGTCCCTC Homo\_sapie -------GCTGACCACGTTGCCTCtTgTGGTgTAAActTGTACCAGTtTTACGGTCCCTC Pan\_troglo CTCATCAGCTGACCACGTTGCCTCtTAcGGTgTAAActTGTACCAGTCTTACGGTCCCTC Rattus\_nor tTCcTCAGCcGACCACGTaGCCgCCTATGGTATAAATaTGTAtCAGTaTTAtGaatCCag Mus\_muscul tcCATCAGCcGACCACGTaGgCaCCTATGGTATAAgTGTaTAtCAGTCTcctGGagaCat Canis\_lupu TGGCCAGTACACCCATGAATTTGATGGcGATGAGGAGTTCTAcGTGGACCTGGAGAAGAA Homo\_sapie TGGCCAGTACACCCATGAATTTGATGGAGATGAGcAGTTCTAcGTGGACCTGGAGAgGAA Pan\_troglo TGGgCAGTACACCCATGAATTTGATGGAGATGAGGAGTTCTATGTGGACCTGGAGAgGAA Rattus\_nor aGGCCAGTACACaCATGAATTTGATGGtGAcGAGGAaTTCTATGTGGACtTGGAtAAGAA Mus\_muscul TGGCCAGTACACattTGAATTTGATGGtGATGAGttGTTCTATGTGGACtTGGAtAAGAA Canis\_lupu GGAaACTGTCTGGCGGCTGCCTGtGTTTAGCAcATTTACAAGtTTTGACCCaCAGGGTGC Homo\_sapie GGAGACTGcCTGGCGGtgGCCTGAGTTcAGCAAATTTggAgGtTTTGACCCgCAGGGTGC Pan\_troglo GGAGACTGTCTGGCaGtTGCCTctGTTccGCAgcTTTAgAgGaTTTGACCCgCAGGGTGC Rattus\_nor GGAGACcaTCTGGaGGaTcCCcGAGTTTgGacAAcTgACAAGCTTTGACCCCCAaGGTGg Mus\_muscul GGAGACTGTCTGGatGCTtCCTGAGTTTgGCcAATTggCAAGCTTTGACCCCCAaGGTGg Canis\_lupu ACTGAgAAACtTgGCTATAaCAAAACAaAACTTGAACATCATGAcTAAAAGgTCCAACaa Homo\_sapie ACTGAgAAACATgGCTgTgGCAAAACACAACTTGAACATCATGATTAAAcGCTaCAACTC Pan\_troglo gCTGAccAACATtGCTATtaCAAAACACAACTTGAACATCcTGATTAAAcGCTCCAACTC Rattus\_nor ACTtcAAgAgATAGCTAcAGCAAAAtACAAtTTGgAaATCcTGATgAAg---TCaAAtTC Mus\_muscul ACTGcAAAACATAGCTgTAGtAAAACACAACTTGggagTCtTGAcTAAgAGgTCaAAtTC Canis\_lupu AACtGCTGCTACCAATGGTAtGTGtCtA---------CCAttCTGCCTCtCtTCA----- Homo\_sapie tACCGCTGCTACCAAT-------------------------------------------- Pan\_troglo tACCGCTGCTACCAATGGTAtGTGtCCA---------CCAttCTGCCTttCtTtA----- Rattus\_nor AACCcCaGCTACCAAcaGTACGTGCtaA---------CCACCCTGCtTCCCCTCtG---- Mus\_muscul cACCcCaGCTACCAATGGTACGTGCtCAcaccccgctCCtCCCTtCCTtCCCTtgGggtg Canis\_lupu ----------------------CTGAATcTgtcCCcaCATcCcAgcTCTCtTTCcCTtCc Homo\_sapie ------------------------------------------------------------ Pan\_troglo -----------------------ctgATcTAtcCCtTtATACcAAgTtTCaTTaTtTtC- Rattus\_nor ----------------TgTGAtCaGAgTATAAAtggTCcTAtAAAaTC-----CTCTCC- Mus\_muscul ggtggtggtgggtggaTaTGActTGAgTATAAAtggTtcTAtAAAaTC-----CTCTCC- Canis\_lupu tccctagcatagatactcttcactgtTTTCCAAGGAtatttcCCCAGATCTtCTCATaGt Homo\_sapie ------------------------------------------------------------ Pan\_troglo --------------------------TTTCCAAGag---GtcCCCAGATCTtCTCATtGc Rattus\_nor --------------------------TTTCCAAGGA---GCACCCgGATCTCtTC----- Mus\_muscul --------------------------TTTCCAAGGA---GCACCCAGATCTCCTC----- Canis\_lupu AATtACTGAAccCTCATCC------TCCCcCATCTgAAAAcTgAaATATTgCCATGTAAT Homo\_sapie ------------------------------------------------------------ Pan\_troglo AATtgCTGAAattTtATCa------TttCTCATCTctAAAATCAcATATTcCCATGTAAT Rattus\_nor -gTCACTGgAgACTCATCCccgctgTtCtTCtTgTttttAAagATgTATTtattTtacAT Mus\_muscul -ATCACTGAAtACTCAcCt------TCCCTCtcCTtAcAAATCATAcATTt-CATGTAAT Canis\_lupu gCAAGAaTCctTacTCCCAtAccAtgTtCCTTgAATCCCTCaAGGAGAcGCCCtgTgGAt Homo\_sapie ------------------------------------------------------------ Pan\_troglo ACAAGggTC----TTtCCAttaTgcaTtCaTTaAgTCCtTCtAGGAGAGGtCtCATcaAC Rattus\_nor AtgtGAgTa--------CACtgTAgcTGtCTTcAgaCaCcagAaGAGAG---CagTgGAt Mus\_muscul AtAcaAcTCgcTgTTCCCACAgTgcaTGCCTggAATCttT---GaAGAGGCCCCAcaGAC Canis\_lupu ATg------------------CTACtTTAaTAAgCAcaCCtgCAtAGAGAAGGGCtCgGG Homo\_sapie ------------------------------------------------------------ Pan\_troglo cTC------------------CTACtTTAtTAAaCATGCCCaCAGAGAGAAGGGCaCAGG Rattus\_nor cTCattacagatggttgtgagCcACCcT-------gTGgttgCtGgGAtttGaaCtCAGG Mus\_muscul ATC------------------CTACCT--------AaGaCCctAGAGAGAAGGGCgCAGG Canis\_lupu ggtAAAGtAtAGGCAGTGCATataCAgcAtTCCCAAgCAGAAGG--------tAAgCAAG Homo\_sapie ------------------------------------------------------------ Pan\_troglo AgtAAAGcAGAGGCAaTGtgT---CgtTgcTCCCAAgtAGAAGG--------tAAAtAAG Rattus\_nor AcctctGgAagaGCAGT-------CAaTgcTCCtAAcCgctgaGccatctctccAgCcct Mus\_muscul gagAAAGtgGAtGCAGTGCA----CAtTAgctCCAAaCAGAAGG--------gAcAattG Canis\_lupu aaCCCTtcCACCAcAgcAtGgAgAAcTgTTGctgcGAgGGCTCCTCtAggAcACAATGCA Homo\_sapie ------------------------------------------------------------ Pan\_troglo GCCtCTtTgACCAgcAggAGaggAAaTgcTGgtAgGAAGaCTCtTCCAggAtgtAATGCA Rattus\_nor tCCCCTcTCttCttAAaAAtcACAcaTtTcatgtaatAtGCTCCTtCACtAgACAgTGCA Mus\_muscul GgCtCTgTgACCAtcAtgtGtgCAAgTcTTGgcAaGAgGGCTCCctCtCcAggCAgTGCA Canis\_lupu GAGCCTCAaGGCAGAG------ttattgCAAtTCAtgTCAgtgCtgcTTCCTCACCgCAG Homo\_sapie -----------------------------------------------------------G Pan\_troglo GAagCTCAGGGCAGAG-----CtATtcaCActTCACAcCAgtgCtgTTTCCTCACCAtAG Rattus\_nor GgGCtTCAGGGagagaAgctcCCATCAgCctCTgACATCcAGACCATTTCCT--ttgCAG Mus\_muscul GAGCtTCAGGG-AGAGAaactCCATCAcCcACTCAtgTCcAGACCATTTCCT--ttACAG Canis\_lupu AGGTTCCTGAGGTGACtGTGTTTTCCAAGTCTCCTGTGATGCTGGGTCAGCCCAACACCC Homo\_sapie AGGTTCCTGAGGTcACAGTGTTTTCCAAGTCTCCcGTGAcaCTGGGTCAGCCCAACACCC Pan\_troglo AGGTTCCTGAGGTcACAGTGTTTTCCAAGTCTCCcGTGAcGCTGGaTCAGCCCAACACCC Rattus\_nor AGGTTCCTGAGGcGACcGTGTTTTCCAAGTCcCCTGTGcTGCTGGGTCAGCCCAACACCC Mus\_muscul AGGcTCCTcAaGcGACtGTGTTccCCAAGTCcCCTGTGcTGCTGGGTCAGCCCAACACCC Canis\_lupu TCATCTGTCTcGTGGACAACATCTTTCCTCCTGTGATCAAtgTCACgTGGtTGAagAATA Homo\_sapie TCATtTGTCTTGTGGACAACATCTTTCCTCCTGTGgTCAACATCACATGGCTGAGcAATg Pan\_troglo TCATCTGTCTTGTGGACAACATCTTTCCTCCTGTGgTCAACATCACATGGCTGAGcAATg Rattus\_nor TCATCTGctTTGTaGACAACATCTTTCCTCCTGcGATCAAtATCACgTGGtTGAGAAAcA Mus\_muscul TCATCTGctTTGTGGACAACATCTTcCCTCCTGTGATCAACATCACATGGCTcAGAAATA Canis\_lupu GGCAcTCcGTCACAGAAGGgGTTTCTGAaACCAGCTTCCTtgCCAAagGgGATCATTCCT Homo\_sapie GGCAGTCAGTCACAGAAGGTGTTTCTGAGACCAGCTTCCTCTCCAAgAGTGATCATTCCT Pan\_troglo GGCAcTCAGTCACAGAAGGTGTTTCTGAGACCAGCTTCCTCTCCAAgAGTGATCATTCCT Rattus\_nor GcaAGcCAGTCACAGAAGGcacTTtTGAGACCAGCTTCCTCTCCAACccTGAcCATTCCT Mus\_muscul GcaAGTCAGTCgCAGAcGGTGTTTaTGAGACCAGCTTCtTCgtCAACcGTGActATTCCT Canis\_lupu TCTcaAAGATCAGTTACCTCACCTTCCTaCCTTCTGCTGAgGAtATTTATGACTGCAAaG Homo\_sapie TCTtCAAGATCAGTTACCTCACCTTCCTCCCTTCTGCTGATGAgATTTATGACTGCAAGG Pan\_troglo TCTtCAAGATCAGTTACCTCACCTTCCTCCCTTCTGCTGATGAgATTTATGACTGCAAGG Rattus\_nor TCcACAAGATggcTTACCTCACCTTCaTCCCTTCTaacGATGAcATTTATGACTGCAAGG Mus\_muscul TCcACAAGcTgtcTTAtCTCACCTTCaTCCCTTCTGacGATGAcATTTATGACTGCAAGG Canis\_lupu TGGAGCACTGGGGCCTGGAtGAGCCaCTTCTGAAACACTGGGGTATGTATGAatTCCACC Homo\_sapie TGGAGCACTGGGGCCTGGAccAGCCtCTTCTGAAACACTGG------------------- Pan\_troglo TGGAGCACTGGGGCCTGGAtGAGCCtCTTCTGAAACACTGGGGTAaGgATGAGtTtCACC Rattus\_nor TGGAGCACTGGGGCCTcGAcGAGCCGgTTCTaAAACACTGGGGTgTGTATGAGCTCtgCC Mus\_muscul TGGAaCACTGGGGCCTGGAgGAGCCGgTTCTGAAACACTGGGGTgTGTATGAGCTCtgtC Canis\_lupu -TCcTgTGGtgCcTTCTT-TTCttTGTCAAgTCCAaAAtAtCcTGCCTTtcAGCCcCgga Homo\_sapie ------------------------------------------------------------ Pan\_troglo ATtTTtTGatgCTTTCTTgT---CTGTCAAgTtCAGAACttCcTGCCTTttActC----- Rattus\_nor caCTTcTGGCACTTTCTcATTCACTGTCAcCTCtAGAACAGCATatCTTCtgGCtTC--- Mus\_muscul ATCTTcTG-CACTTTCTaAcTCAtTGTCAtCTCtAGAACAGCATGtCTTCggGatTC--- Canis\_lupu gtctcAagGctCAAAgCatgtTTatgACACTTcAgG------------------------ Homo\_sapie ------------------------------------------------------------ Pan\_troglo ----TAtatcCCAAAACTtgtTTTCcACACTTcAtGAgtttcttttatcttttttttttg Rattus\_nor ----TAGtGACCAAAACTCACTTTCcACtCTTAAAGA----------------------- Mus\_muscul ----TAGtGACCAAA-CTCACTTTCtACtCTTAAAaA----------------------- Canis\_lupu ------------------------------------------------------------ Homo\_sapie ------------------------------------------------------------ Pan\_troglo aaagaattaagcaacaaaagcacagatttattaaaaaagaaagtacactccacagggtgg Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ----------------------GTTTCTAAtAACAGAgTTCACtCtcTTCCcTAAGCCtg Homo\_sapie ------------------------------------------------------------ Pan\_troglo gagcaggcctgccacttcatggGTTTCTAAtAACAGAcTTCACtCtccTCCcTAAGCCag Rattus\_nor ----------------------GTTTCTAgggctAGAgTTCgtGtCATcCCATtAGCCCA Mus\_muscul ----------------------GcTcCTAAagctAGAtTTCAtGtCATTCCATAAGCCCA Canis\_lupu GtgCCCtgAGACTtCaTAGAcCcAAcagcaccatcacCCtcCtCaaCCcCCCactCCATC Homo\_sapie ------------------------------------------------------------ Pan\_troglo GggCCttcAGtCTttGcAGAgCcAA------------CCCtCCaCCCCAtCCcatCC--C Rattus\_nor Gc-CtCAgAGACcACGTAGgttAA-------------CtCtCtCCCtCACCCTgGCCcTg Mus\_muscul accCaCAaAGgCTAtGTAGAttAA-------------CttgCCCCCtCACCCTgGCCATa Canis\_lupu TCACACctgTACtTGAACcaACACTgtATTCTGACTttcACAACcTCAtTTTCACAGAAC Homo\_sapie --------------------------------------------------------GAgC Pan\_troglo aCACACAtgcACATGAgCacACcCTgCATTCTGAactCAACAACTTCACTTcCACAGAgC Rattus\_nor TCttACACATACATGAAC--AtACTCCcTTCTGACTCCAA-AgCTTCtCTTTCtCAGAAC Mus\_muscul TCttACACATACATGAAC--AtACTCCcTTCTGACTCtAA-AACTTCtCTTTCtCAGAAC Canis\_lupu CTGAGgTTCCAaCCCCTATGTCAGAGCTGACAGAGACTGTGGTCTGTGCCCTGGGGTTGg Homo\_sapie CTGAGATTCCAGCCCCTATGTCAGAGCTcACAGAGACTGTGGTCTGTGCCCTGGGGTTGT Pan\_troglo CTGAGATTCCAGCaCCTATGTCAGAGCTcACAGAGACTGTGGTCTGcaCCCTGGGGTTGT Rattus\_nor CTGAGATTCCAGCCCCcATGTCAGAGCTGACAGAGACTGTGGTCTGTGCCCTGGGGTTGT Mus\_muscul CTGAGATTCCAGCCCCcATGTCAGAGCTGACAGAGACTGTGGTCTGTGCCCTGGGGTTGT Canis\_lupu CTGTGGGCCTtGTGGGCATCGTGaTGGGCACCGTCTTCATtATCCAAGGCCTGCGcTCAG Homo\_sapie CTGTGGGCCTCaTGGGCATtGTGGTGGGCACtGTCTTCATCATCCAAGGCCTGCGtTCAG Pan\_troglo CTGTGGGCCTCGTGGGCATtGTGGTGGGgACCGTCTTgATCATCCgAGGCCTGCGtTCAG Rattus\_nor CTGTGGGCCTCGTGGGCATCGTGGTGGGCACCaTCTTCATCATtCAAGGCCTGCGgTCAG Mus\_muscul CTGTGGGCCTtGTGGGCATCGTGGTGGGCACCaTCTTCATCATtCAAGGCCTGCGaTCAG Canis\_lupu GTGGTACTTCCAGACAtCAAGGaCCtTTGTGAGctgCACCCTaGAAAGGAAGGTAAGGAT Homo\_sapie tTGGTgCTTCCAGACACCAAGGGCCaTTGTGAaTCCCAtCCTGGAAgGGAAGGT------ Pan\_troglo tTGGTgCTTCCAGACACCAAGGGCCCTTGTGAaTCCCAtCCTGaAAAGGAAGGTAAG-AT Rattus\_nor GTGGccCcTCCAGACACCcAGGGCCCTTGTGAGTCCCACCCTGGgAAaGAAGGTAAGGgT Mus\_muscul GTGGcACcTCCAGACACCcAGGGCCtTTaTGAGTCaCACCCTGGAAAGGAAGGTAAGagT Canis\_lupu TcAGATTTGTcAGAGCtgAgagttggAGaCACagtcCAGGAGGAtGGAAAGtggGAGGAG Homo\_sapie ------------------------------------------------------------ Pan\_troglo TgAGATTTGTtAGAGCtgA---------------tgCtGcAGGAaGGAAAGtggGAGGAG Rattus\_nor TtgtgTTTGTgAGAGaCAA-------AGgCACCACaC-GGgGGAgGGgAAGGAAGgGGAG Mus\_muscul TtgtATaTGTggGcaCCAA-------AGctACCACaCAGGgGGAcatAAAGGAAGgGGAG Canis\_lupu ttTGTGGACccAAATGTGGTTGGAAGgTTaTAGGAGAATTGGGAgagGGgATGATGAcag Homo\_sapie ------------------------------------------------------------ Pan\_troglo gCTGTGGACatgAATGTGGTTGaAAG-TTGTAcGgGAATTGGGAagtGGcATGATGAtga Rattus\_nor AC-----AtgAAAAT---GTTGGAActTTGTtGGAG------------------------ Mus\_muscul AC-----AtgAAAATGTGGTTGGAAGcTTGctGtAG------------------------ Canis\_lupu CACAGcAGCCCCCTaaAAtCCAaCcATCT-ATGTCTGTCCTaTTGCAGGtgcacTGCATG Homo\_sapie -------------------------------------------------------GCATc Pan\_troglo CACAGgAGCCCCCTcGgAcCCATCgATCTCATGTgTGTCCTGTTGCAGG-----TGCATc Rattus\_nor ---------CCtCTgGAAcCCATC--TtTCcTGTgTGTttTGTTGtAGG-----TGCgTG Mus\_muscul ---------tCtCTgGAAgCCATCtgTCTCcTGTCTGTttTGTTGCAGG-----cGtgTG Canis\_lupu cCCAcCTcCcaGAGCAGAAGAgTGGACcTGaTAGGccACCTAGCAC----TATTTcCTtG Homo\_sapie gCCATCTACAGGAGCAGAAGAATGGACtTGCTAaaTGACCTAGCAC----TATTcTCTGG Pan\_troglo aCCATCTACAGcAGCgGAAGAgTGGACtTGCTAcaTGACCTAGCAC----TATTcTCTGG Rattus\_nor gCtcTCTACAGG----GAAGAtgtagtgTGtggGGTGACCTcGCACAGTGTgTTTTCTGG Mus\_muscul tCCcTCTtCAGG----GAAGAAgtGgtgTGCTgGGTGACCTgGCACAGTGTgTTTTCTGG Canis\_lupu CCCAgTTCATCATAcTCcTaCTCT-CTaCcAATGcTTCTC-TgTcACCTcTTCTCTG--- Homo\_sapie CCCgATTtATCATATcCcTTtTCTCCTcCAAATaTTTCTCcTCTcACCTTTTCTCTG--- Pan\_troglo CCCgATTtATCATAccCTTTtTCTCCTgCAAATGTTTCTCcTCTTAtCTTTTCTCTGctt Rattus\_nor CCCAATTCATCgTgTTCTTTCTCTtCTcCtggTGTcTCcCATCTTg-CTcTTCcCTt--- Mus\_muscul aCCAATTCATggTgTTCTTTCTCTtCTtCAAgTGaccCcCAaCTTg-CTTTTCTCTt--- Canis\_lupu ----GGACTcAAGa-aCTaTATCCTCTgAGcGCTaAC-----CCTTTaAATTCTaccccT Homo\_sapie ----GGACTTAAGCTGCTaTATCCcCTCAGAGCTCACAAAtGCCTTTacATTCT-----T Pan\_troglo tttttttCTTAAGCTGCTGTATCCcCTCAGAGCTCACAAAtGCCTTTGAATTaT-----T Rattus\_nor ----GGcCccgAG--GCTGTccCaTCTCAtgaCTCACAtgC-CCTTgGAATTC------T Mus\_muscul ----GacCcTgAG--GCTGT-cCCTCTCAcAGCTCACAcAC-CCTTgGAATTC------T Canis\_lupu TCCtTGACtgCCTGtttttgtttgtttgTTTTcTTTTCTTTTCTCAAtTGTCAaCTACAA Homo\_sapie TCCCTGACCTCCTGAt------------TTTTtTTTTCTTTTCTCAAaTGTtACCTACAA Pan\_troglo TCCCTGACCTCCTGA-------------TTTTtTTTTCTTTTCTCAAgTGTtACCTACtA Rattus\_nor cCtCTGA---tCTGAg------------TTTcaTTTT-----------TGgCAtCTtCcA Mus\_muscul TCCCTGA---tCTGAa------------TTTTgTTTTC----------TGTCAtCTtCcA Canis\_lupu tGAgATcTCTGGGaTAtcCCAaCCAGtTACCTgATCCCTCAtT-ACtCTGATCTAgcATt Homo\_sapie AGAcATgcCTGGGGTAAgCCACCCgGCTACCTAATtCCTCAGTAACCtccATCTAAAATC Pan\_troglo AGAgATgcCTGGGGTAAgCCgCCCAGCTACCTAATtCCTCAGTAACatcGATCTAAAATC Rattus\_nor AGtcgaATCT---------------aCTAtagAtTCC----GagACCCTGATt--AAtgC Mus\_muscul AGttAcATCT---------------aCTgCagAcTCtCTCAGagACCCTGATC------- Canis\_lupu cCCAtGGAAatAATAAttTTCtcTTTAAGAGATCcttTAgaTCAAtTTTTcCtgTCTTTC Homo\_sapie TCCAaGGAAgCAATAA-ATTCCTTTTAtGAGATC---TATGTCAAATTTTTCCATCTTTC Pan\_troglo TCCAtGGAAgCAATAA-ATTCCcTTTAAGAGATC---TATGTCAAATTTTTCCATCTTTC Rattus\_nor TCCACcaAACCAATAAAccTCtT------------------------------------- Mus\_muscul --CACaaAACCAATAAAATctCTTc----------------------------------- Canis\_lupu ATCtCAGGGCTGAtTaggACTtTGGtc-------------CcCgCtTtTaTtAtaCCttc Homo\_sapie ATC-CAGGGCTGACTGAAACTATGGCTAAtAATTGgGgtACTCTtATGTTTCAAtCCAAT Pan\_troglo ATC-CgGGGCTGACTGAAcCTATGGCTAAgAATTGtGacACTCTCATGTTTCAAgCCAAT Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu cTAATCTCAcTTtCCAtATtATgTTTCATGcCCAGcAACACcagAaaAtgCAgG-----T Homo\_sapie TTAAcCTCATTTcCCAGATCATtTTTCATGTCCAGTAACACAGAAGCcACCAAGTACAgT Pan\_troglo TTcATCTCATTTgCCAGATCATaTTTCATaTCCAGTAACACAGAAGCAACCAAGTACAaT Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ATAGgCTGATAATATtTTGATaTCTTAGgTaAggaTAATggTTCTcTCTTCCTgtTaTTC Homo\_sapie ATAGCCTGATAATATGTTGATTTCTTAGCTGACATTAATATTTCTTgCTTCCTTGTGTTC Pan\_troglo ATAGCCTGATAATATGTTGATTTCTTAGCTGACATTAATATTTCTTTCTcCtTTGTGTTC Rattus\_nor ------------------------------------------------------------ Mus\_muscul ---------TtATATGTTGtc--------------------------------------- Canis\_lupu TCAtgtTTgGGtACTGtCACaC-TCCCcCAATTCAGaCAcCAAgaAAAgTAATatAagCC Homo\_sapie cCACCCTT-GGCACTGCCACCCAcCCCTCAATTCAGGCAACAATGAAATTAATGGATACC Pan\_troglo TCACCCTT-GGCACTGCCgCCCATCCCTCAATTCAGGCAACAATGAAgTTAATGGATACt Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu CTCTGaCCTTGGtgtAaAtTTGgTATAGaAgAAA-TacAAAgCCAAgAAATAAGTTcaTA Homo\_sapie gTCTGCCCTTGGCcCAGAATTGTTATAGCAAAAATTTTAgAACCAAAAAATAAGTcTGTA Pan\_troglo CTCTGCCtTTtGCtCAGAATTGTTATAGCAAAAATTTTAAAACCAAAAAATAAGTTTGTA Rattus\_nor -------------------------------------------------ATAAGTT---- Mus\_muscul ------------------------------------------------------------ Canis\_lupu CTtcTTTtAAcATaatTTTagAAAGcTATGACAGAGAAATAAGTTAaGATAAAGaAAtTT Homo\_sapie CTAATTTCAATgTGGCTTTTAAAAG-TATGACAGAGAAATAAGTTAGGATAAAGGAAaTT Pan\_troglo CTAATTTCAATATGGCTTTTAAAAG-TATGACgGAGAAATAAaTTAGGATAAAGGAAcTT Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu TGAATtTCAAAAgTAcCAAAAGacAAAtTgTtTTCcaAAActTTaaAATTTcaatttgtg Homo\_sapie TGAATCTCA--------------------------------------------------- Pan\_troglo TGAATCaCAAAAaTAtCAAAAGtaAAAaTtTaTTCtcAAAacTTtgAATTT--------- Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu aagAAtGAATGATGAtAGgAGAAGCtTTCCTCTCCCaTCCTCACCcaTgAGaagATAAgA Homo\_sapie ------------------------------------------------------------ Pan\_troglo -gtAAaGAATGATGAcAGtAGAAGCcTTCCTCTCCCcTCCTCACCt-TtAGggaATAAaA Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu ATTCTTTAGGcAGGAAAAtAAATGGAAGTCgGgtaagAgAgCATTAGAataagaccataa Homo\_sapie ------------------------------------------------------------ Pan\_troglo ATTCTTTAGGtAGGAAAAgAAATGGAAGTCaG----aAaAaCATTAGA------------ Rattus\_nor ------------------------------------------------------------ Mus\_muscul ------------------------------------------------------------ Canis\_lupu agtaagtacctgaggacaggtact Homo\_sapie ------------------------ Pan\_troglo ------------------------ Rattus\_nor ------------------------ Mus\_muscul ------------------------