Optimal growth temperature per Archaeal class c Baldrarchaeia (n=5) c__Heimdallarchaeia (n=83) c__Hermodarchaeia (n=13) c__JAGGXT01 (n=1) c__Jordarchaeia (n=9) c__Lokiarchaeia (n=112) c_Njordarchaeia (n=2) c__Odinarchaeia (n=3) c__Sifarchaeia (n=6) c__Thorarchaeia (n=60) c__Wukongarchaeia (n=1) c__Aenigmatarchaeia (n=165) c__Altiarchaeia (n=33) c__B1Sed10-29 (n=19) c__EX4484-52 (n=34) c__Huberarchaeia (n=1) c lainarchaeia (n=101) c__Micrarchaeia (n=330) c__Nanoarchaeia (n=847) c__Nanosalinia (n=29) c__SpSt-1190 (n=10) c__Undinarchaeia (n=6) c__Archaeoglobi (n=62) c__B47-G6 (n=3) c__B88-G9 (n=1) c__Bog-38 (n=7) c DAOVMN01 (n=1) c__DTKX01 (n=5) c__E2 (n=83) **Temperature** c__EX4484-6 (n=12) >80 _Hadarchaeia (n=26) 60 c__Halobacteria (n=563) c__Hydrothermarchaeia (n=23) 45 c__JACRDV01 (n=1) 30 c__JAEHCK01 (n=2) 15 c__JAKEGO01 (n=3) c__JANQNL01 (n=1) c__JAQUQK01 (n=1) c__JASEFT01 (n=3) c__JASLWR01 (n=1) c__Methanobacteria (n=239) c__Methanocellia (n=6) c__Methanococci (n=35) c__Methanoliparia (n=5) _Methanomicrobia (n=248) c__Methanonatronarchaeia (n=6) c__Methanopyri (n=5) c__Methanosarcinia (n=254) c__Poseidoniia (n=386) c__SW-10-69-26 (n=5) c__Syntropharchaeia (n=61) c__Thermococci (n=116) c__Thermoplasmata (n=553) c__UBA148 (n=10) c__UBA186 (n=3) c__Bathyarchaeia (n=285) c__DRAE01 (n=1) c__EX4484-205 (n=12) c__JANJXX01 (n=10) c__Korarchaeia (n=31) c__Methanomethylicia (n=41) c__Nitrososphaeria (n=505) c__Nitrososphaeria_A (n=48) c__QMWL01 (n=1) c__Thermoprotei (n=89) c__Thermoprotei_A (n=239) Ó 25 75 50 100 no. of genomes (%)