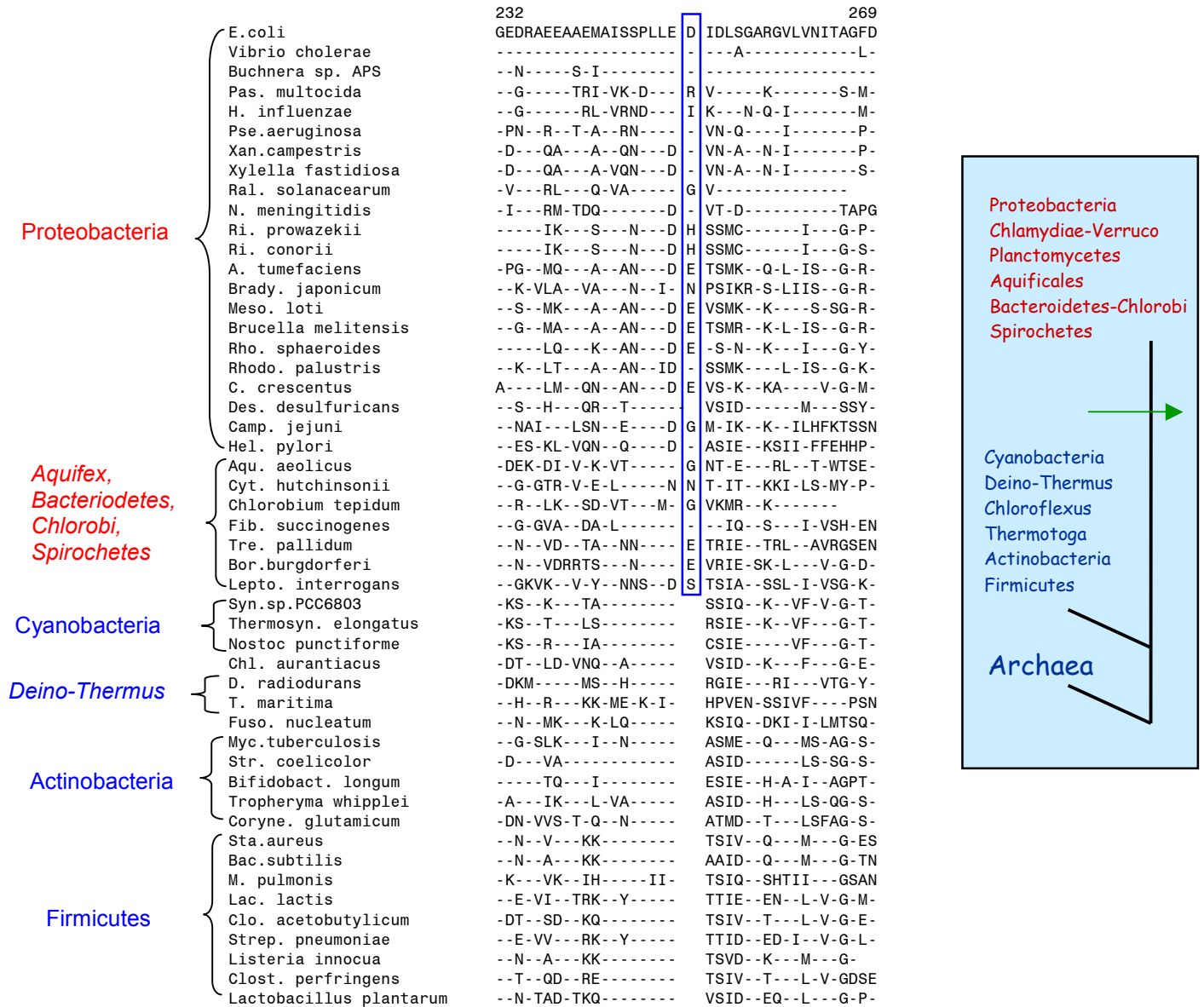


# Main Line Signature in FtsZ Protein

Gupta, R.S.(1998) Microbiol.Mol.Biol.Rev 62:1435-91;  
Gupta (2001) Int. Microbiol. 4, 187-202.



A 1 aa insert in FtsZ protein that is commonly shared by all species belonging to Proteobacteria, *Bacteroidetes-Chlorobi*, *Chlamydiales*, *Aquificales* and *Spirochetes* phyla. The absence of this insert in Cyanobacteria, *Deinococcus-Thermus*, *Chloroflexi*, *Actinobacteria*, *Thermotoga*, *Firmicutes* (rooting established based on other described signatures) indicates that the groups lacking this insert are ancestral. The genetic change (RGC) responsible for this insert likely occurred at the evolutionary stage indicated in the interpretive diagram. Dashes indicated identity with the amino acid on the top line. Sequence information for only representative species is shown. All other sequences from these groups behaved in the indicated manner.