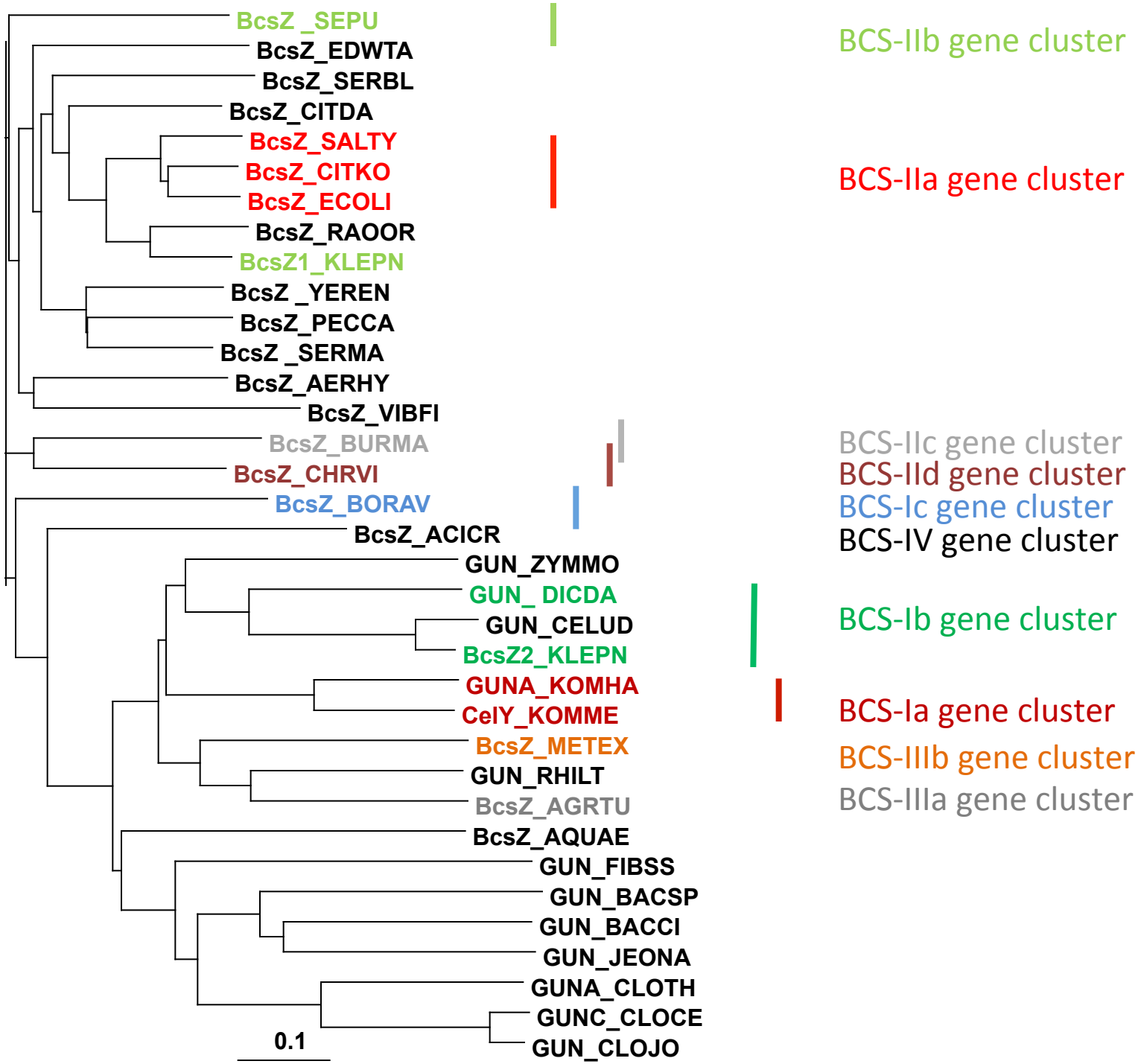Additional file 10