Figure 4 Proposed (so called 4S) pathway for DBT desulfurization by *Serratia marcescens* (UCP 1549). The DBT desulfurization pathway results: (1) dibenzothiophene, (2) dibenzothiophene oxide, (3) dibenzothiophene dioxide, (4) sulfinato phenyl phenol, (5) hydroxyphenyl (6) biphenyl. The structure on parentheses is the metabolite detected, other structures are suggested, not detected.