Multiple sequence alignment of DUF1023 proteins (Pfam database accession number: PF06259) and representative αβ hydrolases (carboxylesterase and fungal lipase families of αβ hydrolases in SCOP database). Each sequence is identified by NCBI gene identification (gi) number. The gi numbers of sequences with known structure are underlined. Uncharged residues at dominantly hydrophobic positions are marked in yellow and small residues (G, A, S, T, C, P) at sites containing mostly small residues are shadowed in gray. The conserved catalytic residues S, D and H are highlighted with bold white letter in black background. The residues possibly forming oxyanion hole are marked in bold red letter. The diagrams of the secondary structure elements for the two αβ hydrolase families are shown below the corresponding sequences. The diagrams are drawn according to the structures of *Pseudomonas fluorescens* carboxylesterase (PFC, PDB: 1aur, chain A, gi|3023719) and *Rhizomucor miehei* fungal lipase (RML, PDB: 5tgl, gi|494918): blue cylinders and yellow arrows represent α-helices and β-strands, respectively; β-hairpins St-S4 in PFC and the short α-helix H2 functioning as 'lid' in RML are also shown.