Unexpected opening of the glycosylation site in hexagonal form of CAL-B: Is it functionally related?

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We discovered the new, hexagonal crystal form of lipase B from Candida antarctica (CAL-B). The NAG (N-acetyl-D-glucosamine) molecules which were closing the glycosylation site in the orthorhombic form in our hexagonal structure unexpectedly adopt an open conformation. We do not know whether the opening and closing of the glycosylation site by the 'lid' NAG moiety, could be related to the opening and closing of the active center of the enzyme upon substrate binding and product release. The packing of molecules in the hexagonal crystal makes the active center of the enzyme very well accessible for the ligand, which, in our opinion, may help in the enzyme-ligand complex formation.

Biography
Jarekslaw Blaszczyk has completed his PhD from Technical University of Lodz and Postdoctoral studies from NIH, National Cancer Institute at Frederick. He has then become Research Assistant Professor at Michigan State University. He has also served as the PDB Annotator at Rutgers University of New Jersey. Currently he is an Assistant Professor at the Centre of Molecular and Macromolecular Studies of the Polish Academy of Sciences. He has published more than 67 papers in reputed journals and has been serving at several grant review panels at NCN, the Polish National Science Center.

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