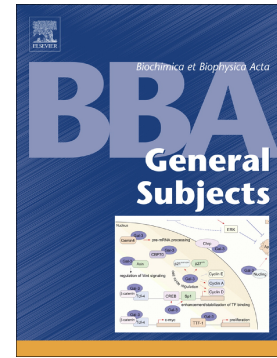


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# Protein topology determines substrate-binding mechanism in homologous enzymes

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Abbreviations: TIGK, *Thermococcus litoralis* glucokinase; PerGK, Permuted ADP dependent Glucokinase.

## Abstract

During evolution, some homologs proteins appear with different connectivity between secondary structures (different topology) but conserving the tridimensional arrangement of them (same architecture). These events can produce two types of arrangements; circular permutation or non-cyclic permutations. The first one results in the N and C

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