

**Table 5. Solvent-accessible surfaces for  $\alpha$ -helical transition of GIP<sub>6-28</sub>**

	ASA GIP <sub>6-28</sub> extended*	ASA GIP <sub>6-28</sub> $\alpha$ - helical**	$\Delta$ ASA GIP <sub>6-28</sub> ***	$\Delta\Delta$ ASA ITC/structure****
Apolar	1,897	1585	-312	-504 $\pm$ 114
Polar	1,616	833	-783	-1012 $\pm$ 112
Total	3,513	2418	-1095	-1516 $\pm$ 226

Solvent accessible surfaces (ASA) were calculated using the program AREAIMOL from CCP4 software package (probe radius 1.4 Å).

\*GIP residues 6-28 in hypothetical extended conformation (dihedral angles according to anti-parallel  $\beta$ -sheet).

\*\*GIP residues 6-28 as seen in the crystal structure of the complex.

\*\*\* $\Delta$ ASA calculated from hypothetical transition between extended and helical conformation of GIP<sub>6-28</sub>.

\*\*\*\* $\Delta\Delta$ ASA between structure-derived and calorimetry-derived  $\Delta$ ASA values (SI Table 4).