Table IV. *Amino acid and protein block preferences for β-bulges*: For each β-bulge type and for all β-bulge residue positions (X, 1, 2, 3 and 4), the over-represented amino acid and protein block are specified. The data has been normalized with respect to the amino acid and protein block frequencies in the β-sheets. These over-represented amino acids and PBs correspond to positive Z-scores greater than the threshold value of 4.42. The hatched cases correspond to undefined residue positions. The bold and underlined labels indicate new preferences compared to the previous study(Chan et al. 1993).

		Amino acid preferences					Protein block preferences				
β-bulge type	%	X	1	2	3	4	X	1	2	3	4
A B	0.63		D, N	D, G, N				*b, i*	*b, i*		
P B	1.34		D, G, N	D, N				*b, i*	*b, i*		
A C	52.59	I, **L**, R, V, W	**D**, I, **K**, L	A, **D**, **E**, G, **H**, **K**, **R**, S			*d, h*	*a, b*	*c, d, g, j*		
P C	4.46	V	I, V	K			*c*	*a, f, g*	*b, i*		
A S	2.52	G, N, P	G, P, S	D, E, G, N, P	D, E, G, N, P	D, E, G, N, P	*b, i*	*b, f, h, j*	*b, i, k*	*b, i, k*	*b, i, k*
P S	0.82	D, P	D, K, N	P	P	P	*b*	*e, f, g*	*b, h, k*	*b, h, k*	*b, h, k*
A W	3.75	**G**, **N**, **S**, T, **W**	D, E, **G**, **N**, P	D, **G**, N, **P**			*b, d*	*b, h, i, j*	*a, b, i*		
P W	1.21	---	T	D, E, G			*b, i*	*b, h*	*b, d, g, i, j*		
A G	32.66	C, D, N	**D**, G, N	D, E, K, **N**, Q, R, **S**, **T**			*f*	*i, p*	*a*		
	100.00										