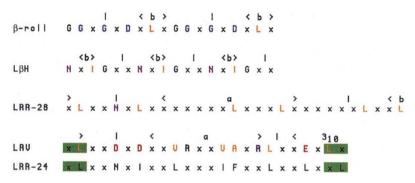


Leucines on a roll

Bostjan Kobe Nature Structural Biology, **3**, no 12, 977–980 (1996).

Figure 3 was inadvertently misprinted. The version to the right is as it should have appeared in the December issue of *Nature Stuctural Biology.*

Fig. 3 Consensus sequences of repeats in proteins with coiled folds. Structural units in α/α coiled folds and right-handed β-helices do not shown any iden-



tifiable sequence repeat, although attempts have been made to define a structural profile for the latter³³. L β H, left-handed β -helix. The approximate locations of the elements of secondary structure are shown above the sequence: "a", α -helix; "b", β -strand; "3₁₀", 3₁₀-helix; "l", loop. Some consensus residues that perform similar roles in different coiled folds are coloured: yellow, hydrophobic residues that form the hydrophobic core of the coil; magenta, polar residues that form hydrogen bonds with neighbouring repeats, such as in asparagine ladders⁷; red and blue, Asp and Arg residues that form a ladder in LRV; cyan, residues that coordinate Ca²⁺ ion in the β -roll structures. Two consensus sequences are shown for LRR proteins corresponding to two subfamilies identified by sequence-profile searching³⁰: the longer ~28-residue LRRs found in RI (LRR-28), and the "typical" shorter LRRs with ~24 residues found in >90% of LRR proteins for which no structural information is currently available (LRR-24). The important differences between LRR and LRV consensus sequences, the xLxL motif verusus the LxxL motif, respectively, are highlighted with a green box. The 'phasing' of LRRs (that is, what residue corresponds to the beginning of a structural unit) has been depicted rather arbitrarily in the literature. Here I use a phasing different from that of Peters et al.², not with the intention of confusing the readers, but to illustrate the unit most compatible with genetic and biochemical data such as the exon/intron boundaries and the neurotropin binding activities of single motifs from neurotropin receptors (refs 35,36; M.E. Lang, B.K., J.M. Windisch, R. Marksteiner, E. Schneider-Scherzer, M. Schweiger and R. Schneider, personal communication).

