

Supplementary Table S1

Structural statistics for the <i>Ov</i>-GRN peptides ensemble		
	Ov-GRN ₁₂₋₃₄	Ov-GRN _{12-35_3s}
Experimental restraints		
Interproton distance restraints	252	113
<i>Intraresidue</i>	78	46
<i>Sequential</i>	139	52
<i>Medium range (i-j < 5)</i>	21	4
<i>Long range (i-j ≥ 5)</i>	14	44
Disulfide-bond restraints	6	9
Dihedral-angle restraints	14	10
R.m.s. deviations from mean coordinate structure (Å)		
Backbone atoms	0.32 ± 0.15	0.65 ± 0.2*
All heavy atoms	0.93 ± 0.27	1.65 ± 0.33*
Ramachandran Statistics		
% in most favoured region	71.4	78.2
% in additionally allowed region	28.6	21.8

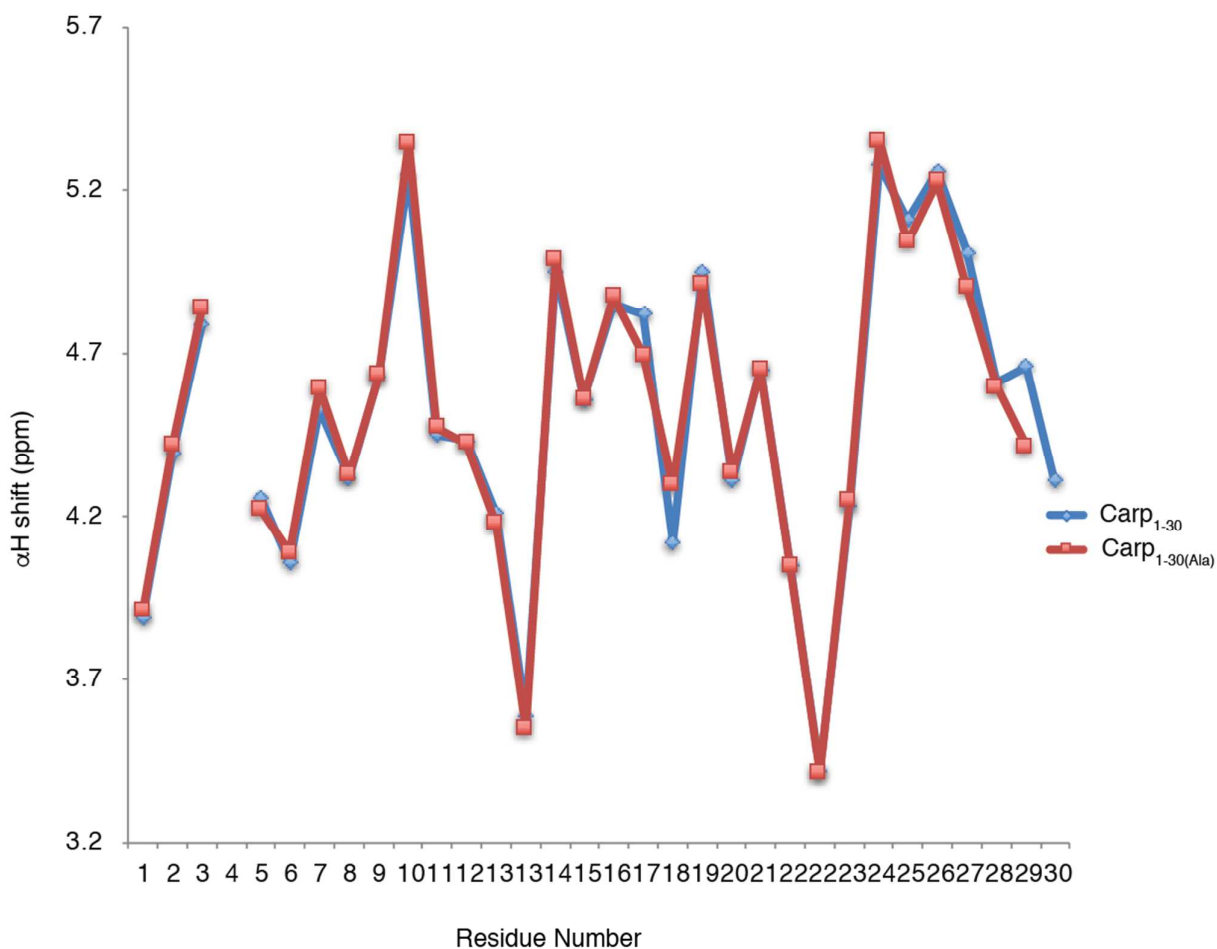
* RMSD for residues 12-24.

Supplementary TableS2. CYANA target functions for the 15 possible disulfide bond connectivities present in *Ov*-GRN_{12-35_3s}.

Set Number	Disulfide bonds connectivity	Average Target Function \pm SD
1	1-14, 8-23,15-24	*0.016 \pm 0.003
2	1-14, 8-24, 15-23	3.08 \pm 0.18
3	1-14, 8-15, 23-24	3.59 \pm 0.15
4	1-8, 14-23, 15-24	3.72 \pm 0.02
5	1-8, 14-15, 23-24	5.71 \pm 0.32
6	1-8, 14-24, 15-23	5.21 \pm 0.25
7	1-15, 8-14, 23-24	3.31 \pm 0.04
8	1-15, 8-23, 14-24	1.58 \pm 0.37
9	1-15, 8-24, 14-23	1.28 \pm 0.2
10	1-23, 8-14, 15-24	*0.018 \pm 0.01
11	1-23, 8-15, 14-24	0.32 \pm 0.05
12	1-23, 8-24, 14-15	2.53 \pm 0.23
13	1-24, 8-14, 15-23	2.61 \pm 0.11
14	1-24, 8-15, 14-23	1.18 \pm 0.12
15	1-24, 8-23, 14-15	2.49 \pm 0.29

*The two connectivities with the lowest target functions are highlighted with an asterisk. The connectivity corresponding to Set Number 1 has the lowest target function indicating that the distance and angle restraints satisfy this connectivity better than the other connectivities, and it is therefore the most likely connectivity present in *Ov*-GRN_{12-35_3s}.

Supplementary Figure S1

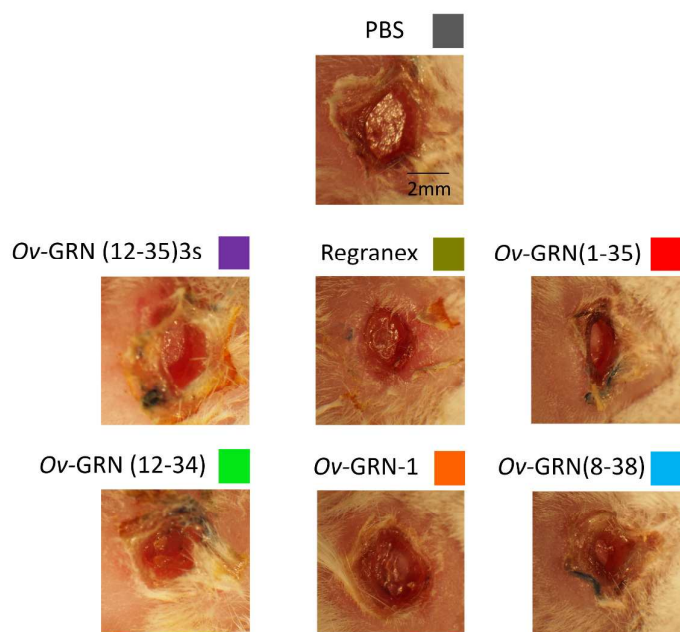


Chemical shift comparison between the published shifts of a truncated form of Carp granulin[1] and the mutant with C17A and C27A mutations.

References

1. Vranken, W.F., Chen, Z.G., Xu, P., James, S., Bennett, H.P., and Ni, F. (1999). A 30-residue fragment of the carp granulin-1 protein folds into a stack of two beta-hairpins similar to that found in the native protein. *J. Pept. Res.* 53: 590-597.

Supplementary Figure S2



Supplementary Figure S2: Mouse wound healing day 4 images. Representative images from mouse wound healing study presented in Figure 5. Wound healing outcomes from treatments with 56 pmoles of recombinant *Ov*-GRN-1, *Ov*-GRN-1 peptides, unrelated peptide, thioredoxin (TRX) protein controls and 71 pmoles Regranex in 1.5% methylcellulose gel applied daily in 50 μ l volume from days 0-4 to a ~ 0.2 cm² wound arising from biopsy punch to the scalp between the ears. The treatment colors are maintained across Figures 2-5.