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ARC repression

- I - slows rate of polymerase binding promoter
- speeds up rate of promoter clearance
(rate RNA pol starts transcription)

∴ Appears to be in conflict

- II. Amino acids that contact DNA backbone may have a role in providing specificity by enhancing strength of specific contacts

How?

∴ may only bind backbone in specific sequence context

- III - Mutants ... not too many homologs -- so look at mutations instead

For structure... what's important?

① hydrophobic core

② turns

③ salt-bridges

But many areas of structure can be changed if change all at once

So why is it this way?

① evolution history needed at one way

② evolution can't change combinatorially

Protein stability

Random mutagenesis of 5 residues at C-termini.

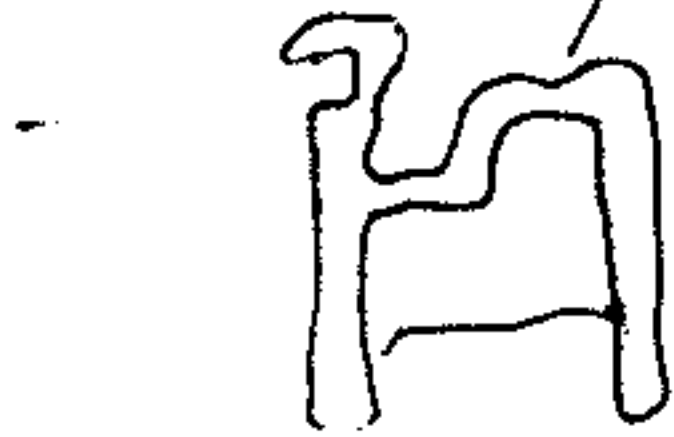
If hydrophobic = unstable } Protein = fsp
If polar = stable }

part of SSRA protein
AANDENYALAA

↓
attached to end of
IL6 in cloning proct

SSRA = 105q RNA

- forms Zary structure



The model was
in color so we
knew it was
right?

What happens to RNA that is missing a
stop signal? ... ribosome gets to end...
what does it do?

E. coli protease mutants

ClpP ClpX ClpA

- all show reduced
degradation of tag

ClpX disassembles MutA tetramer

Proteases that distinguish based on C-term

HflB - cyt. face of membrane

ClpXP - cytoplasm

KlpAP - cytoplasm

Tsp - periplasm