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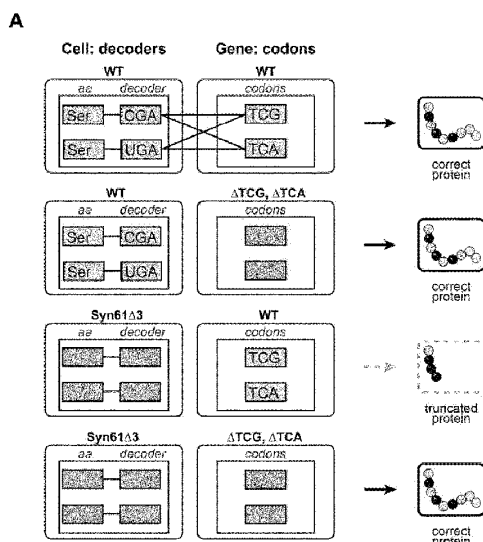
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(54) Title: GENETIC CODES

Figure 1



(57) Abstract: Provided are cells that are resistant to mobile genet-
ic elements or horizontal gene transfer, and methods for obtaining
said cells. Also provided are methods for preventing the horizontal
transfer of genetic information between a mobile genetic element
and a first cell, cells making use of new genetic codons schemes and
related subject matter, kits comprising mutually orthogonal cells,
and mobile genetic elements. Also provided are methods of altering
the susceptibility of a gene to mutations that alter the encoded
amino acid sequence, methods for evolving or improving a protein,
and methods for rendering a target gene more resistant to mutation.
Additionally provided are uses of the cells for making polymers
and methods comprising using the cells for making polymers.

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