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COVER The crystal structure of *Escherichia coli* glutamyl-tRNA synthetase (in blue) complexed with tRNA^{Gln} (in red and yellow) and adenosine triphosphate (ATP, in green). The structure shows that this enzyme recognizes this specific tRNA and discriminates against the other sixty through extensive interactions with the acceptor stem and anticodon of the tRNA. See pages 1135 and 1152. [Graphics by M. A. Rould, J. J. Perona, P. Vogt, and T. A. Steitz, Yale University, New Haven, Connecticut]

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