

RNA

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Cover Illustration: M. tuberculosis aminoacyl-tRNA synthetase PheRS complex (PDB id: 7K9M; Michalska K, Jedrzejczak R, Wower J, Chang C, Baragana B, Gilbert IH, Forte B, Joachimiak A. 2021. Mycobacterium tuberculosis Phe-tRNA synthetase: structural insights into tRNA recognition and aminoacylation. Nucleic Acids Res **49**: 5351–5368). Dimeric M. tuberculosis Phe-tRNA synthetase is shown complexed with unmodified tRNA^{Phe} and a nonhydrolyzable phenylalanine adenylate analog. The topography of amino adenylate-binding and editing sites at different stages of tRNA binding may provide insights for rational design of antituberculosis drugs. RNA backbone is displayed as a red ribbon; block bases use NDB colors: A—red, C—yellow, G—green, U—cyan; ligase α and β subunits are displayed with gold and chocolate ribbons, respectively; phenylalanine adenylate analog is shown as spheres. Cover image provided by the Nucleic Acid Database (ndbserver.rutgers.edu). Image generated using DSSR and PyMOL (Lu XJ. 2020. Nucleic Acids Res. **48**: e74).

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