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The crystal structures of post-reactive states of 2'-5'-oligoadenylate synthetase provide new insights into the mechanism of the innate immune signaling

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The innate immune sensor 2'-5'-oligoadenylate synthetase (OAS) is among the most promising targets for the development of new antivirals. Here we report the results of kinetic crystallography, mutagenesis, and computational chemistry studies of the OAS1 product release mechanism. These investigations provide new insights into the rate-limiting steps of innate immune signaling, which can help develop allosteric activity modulators of OAS for therapeutic application.

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