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edited by  
Edward P. Gelmann  
*University of Arizona*

## THERAPEUTIC TARGETING OF RAS MUTANT CANCERS

Edward C. Stites

*Salk Institute for Biological Studies*

Kendra Paskvan

*Pacific Northwest University for Health Sciences*

Shumei Kato

*University of California San Diego*



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Shaftesbury Road, Cambridge CB2 8EA, United Kingdom  
One Liberty Plaza, 20th Floor, New York, NY 10006, USA  
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## Therapeutic Targeting of RAS Mutant Cancers

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Edward C. Stites  
*Salk Institute for Biological Studies*

Kendra Paskvan  
*Pacific Northwest University for Health Sciences*

Shumei Kato  
*University of California San Diego*

**Author for correspondence:** Edward C. Stites, [estites@salk.edu](mailto:estites@salk.edu)

**Abstract:** The KRAS oncogene is believed to be the most common single nucleotide variant oncogene in human cancer. Historically, efforts to target KRAS and the other RAS GTPases have struggled. More recently, efforts have focused on identifying and exploiting features unique to specific oncogenic mutations. This has led to the first FDA approval for a RAS targeted therapy. This new agent is a covalent inhibitor that reacts with the cysteine residue created by a codon 12 glycine to cysteine (G12C) mutation within KRAS. Mutant-specific strategies may also exist for other KRAS single nucleotide variants, and recent studies provide examples and mechanisms.

**Keywords:** KRAS, covalent inhibitor, targeted therapy, personalized medicine, G12C

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