

Copy of a printed diagram referenced as "Proposed mechanism for the specific action of 5FU"

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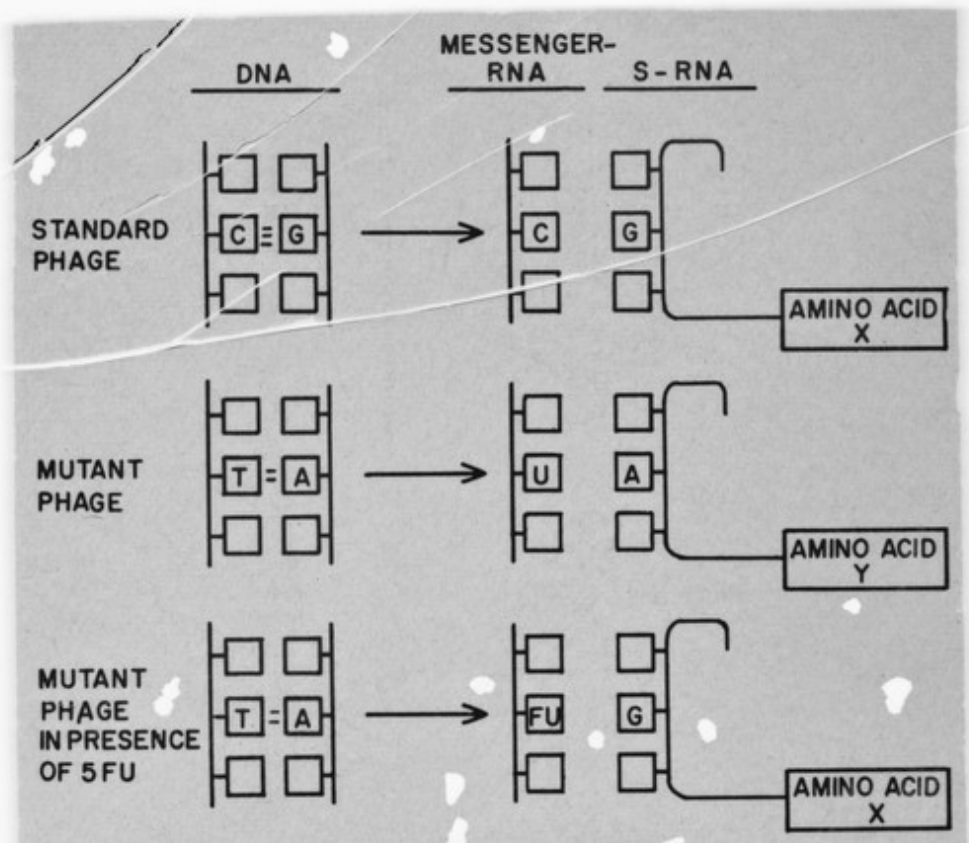
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phage. This response is highly specific, occurring only with cer-



Proposed mechanism for the specific action of 5FU. The GC pair in the DNA of the standard (normal) phage is translated as C in the messenger-RNA, and a complementary S-RNA adaptor pairs with the latter, thus specifying amino acid X. For a mutant arising by a GC → AT transition, the base in the messenger-RNA becomes U, specifying an incorrect amino acid Y. In the presence of FU, however, U may be replaced by the analogue, which, when occasionally pairing like C, produces a normal message.

changed.

ates the proposed mechanism for a mutant that has arisen by substitution of an adenine for a guanine (hyp-