Supplementary Information

Insights into the base-pairing preferences of 8-oxoguanosine on the ribosome

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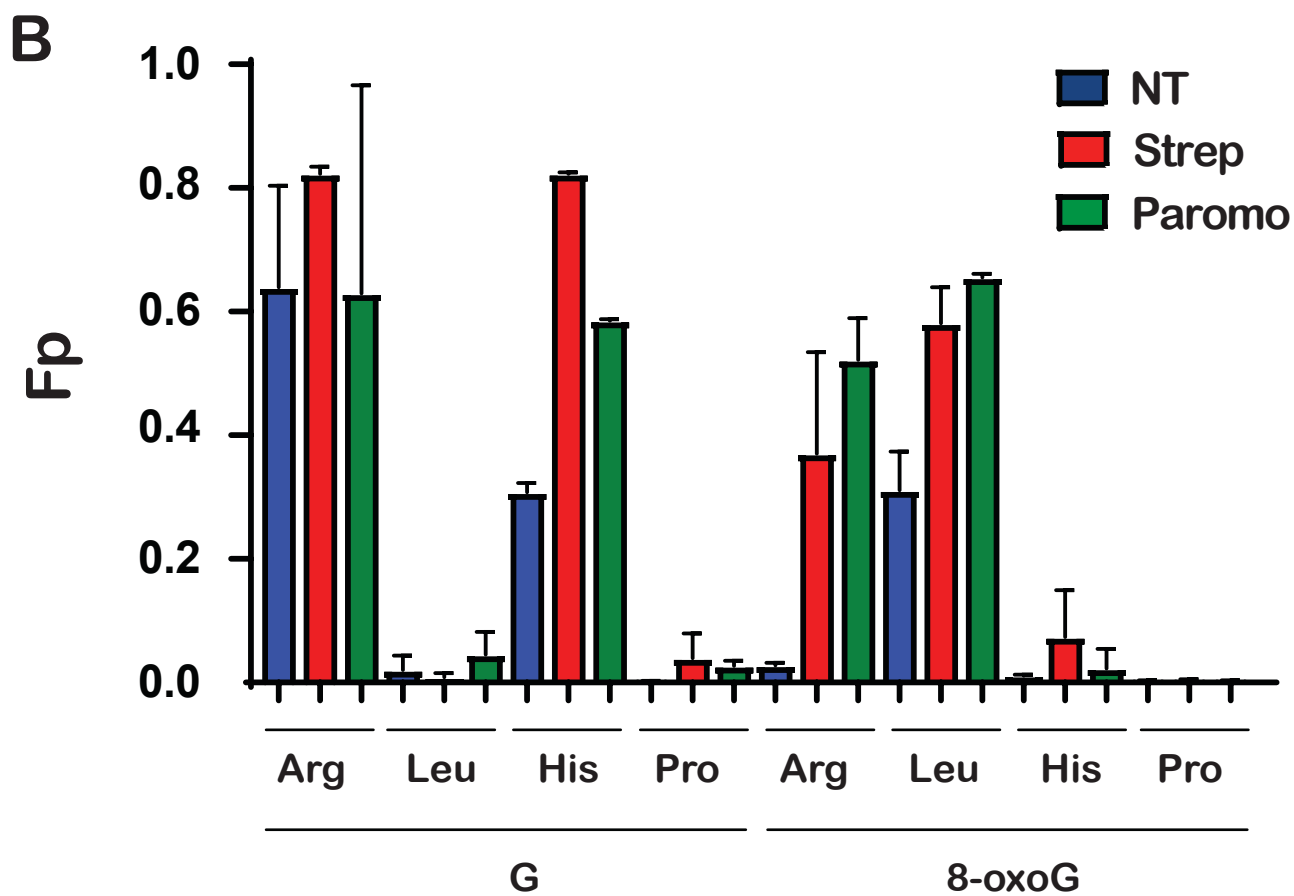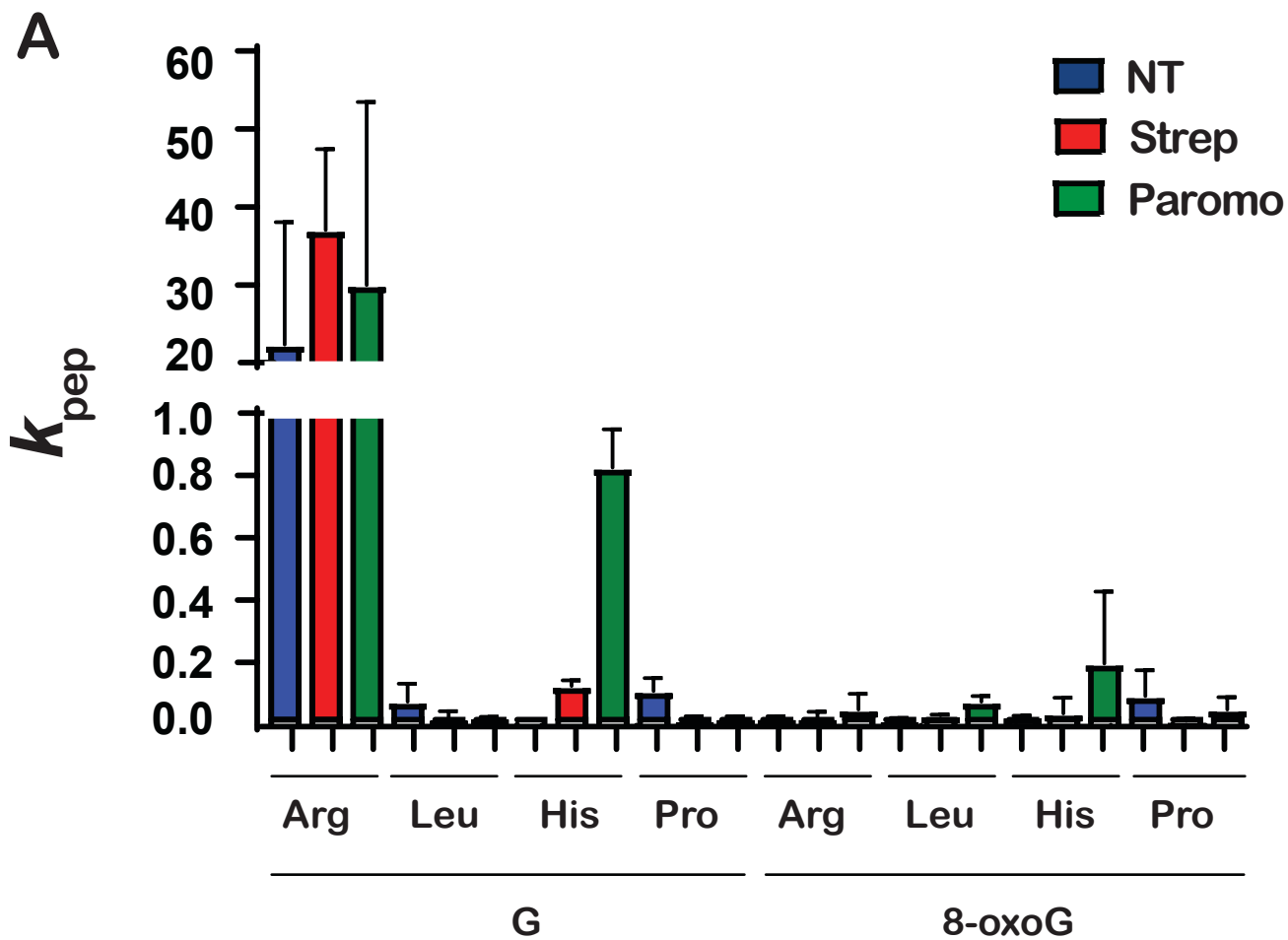Fax: (314) 935-4432

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Figure S1: Streptomycin and paromomycin suppress the effect of 8-oxoG at the second position of the codon.

A) Bar graph showing the observed rates of peptide-bond formation (k_{pep}) determined for complexes displaying the CGC (G) or $C^{8oxo}GC$ (8-oxoG) with the indicated ternary complexes. B) Bar graph showing the end-point values obtained for reactions shown in A. Plotted is the mean of duplicate reactions with the error bars representing the standard deviation around the mean.
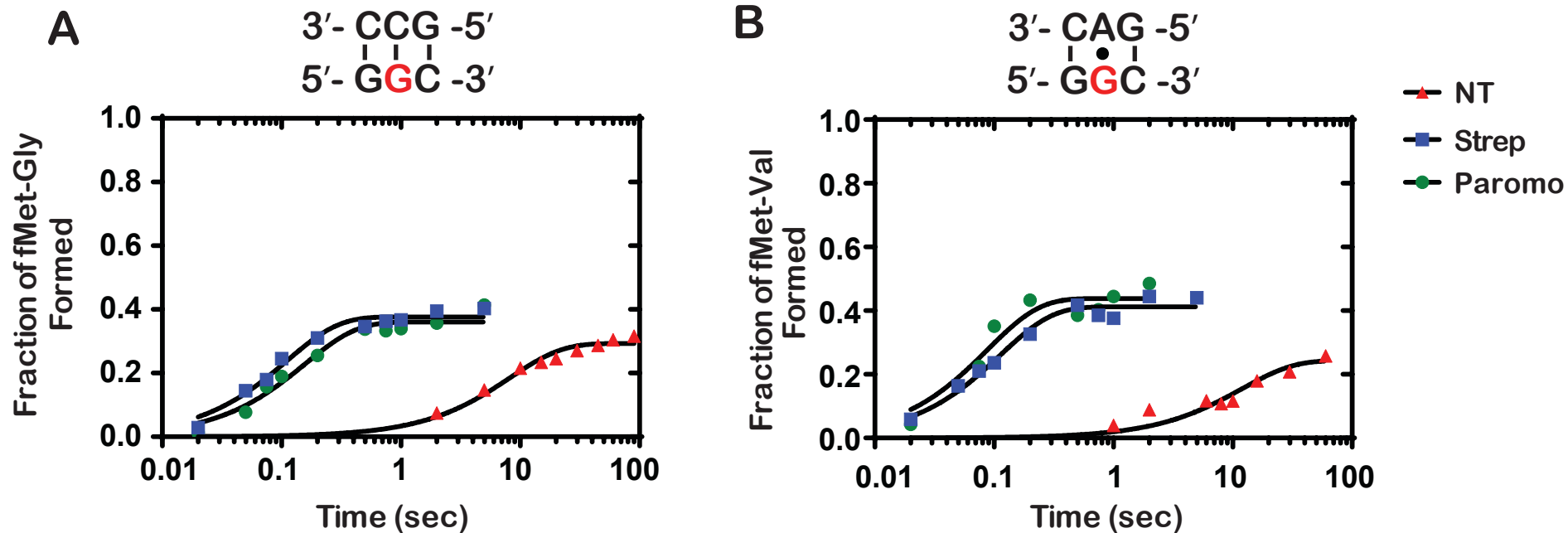
Figure S2: Streptomycin and paromomycin suppress the effects of 8-oxoG on k_{pep} for a complex displaying the $G^{8oxo}GC$ codon in the A site

A-B) Time courses of peptide-bond formation between the indicated initiation and ternary complexes either in the absence of antibiotics or in the presence of paromomycin or streptomycin.
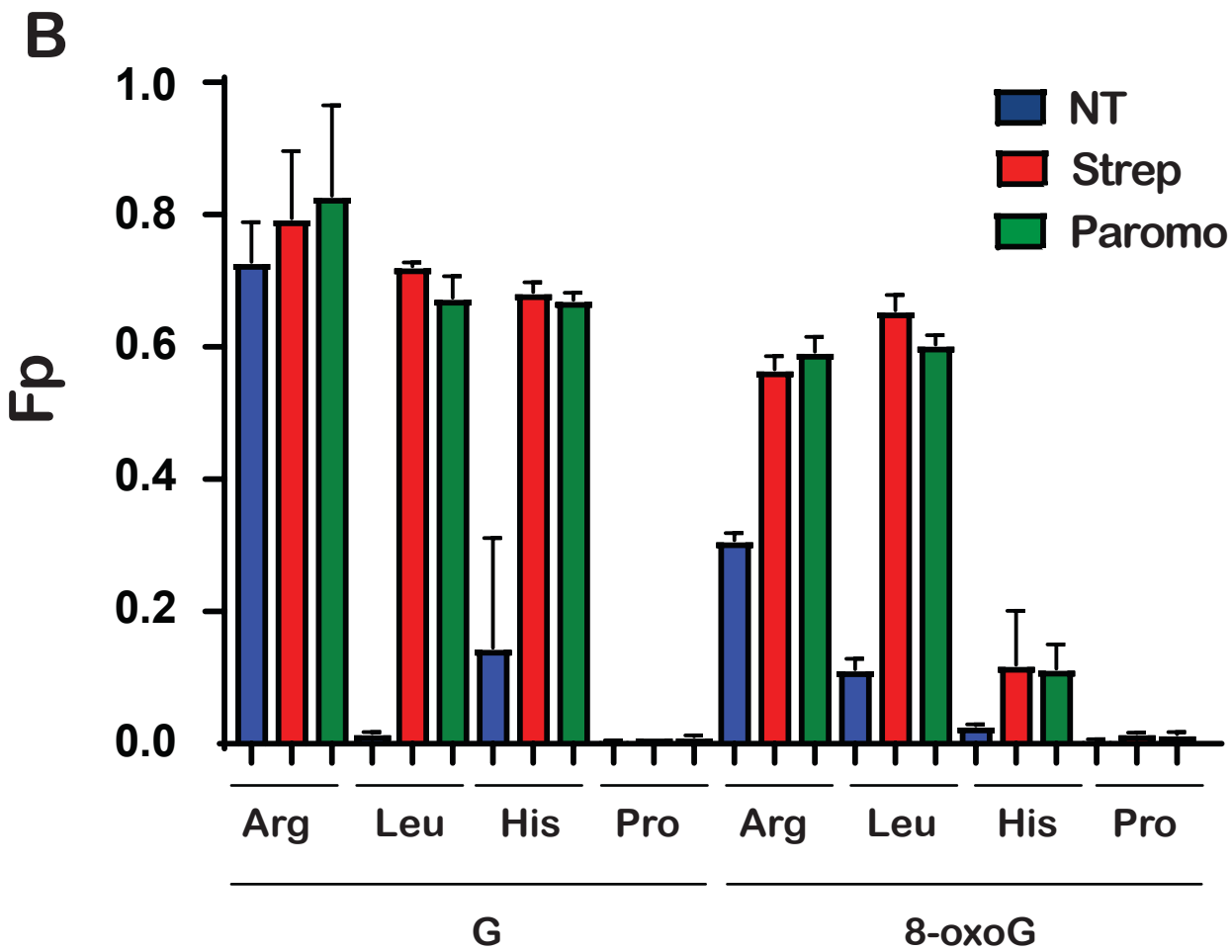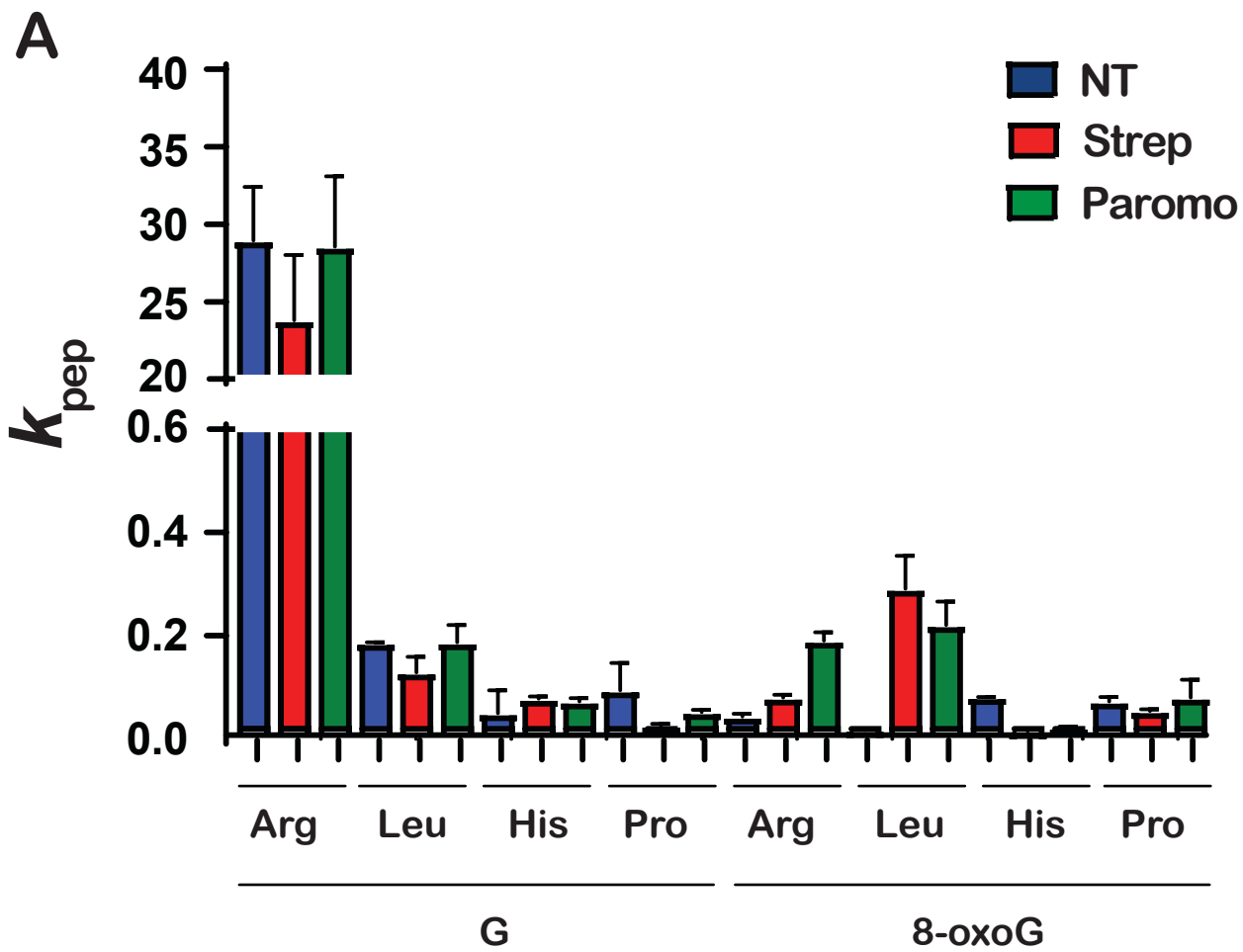
Figure S3: Streptomycin and paromomycin suppress the effect of 8-oxoG at the first position of the codon.

A) Bar graph showing the observed rates of peptide-bond formation (k_{pep}) determined for complexes displaying the GUU (G) or ^{8oxo}GUU (8-oxoG) with the indicated ternary complexes.
B) Bar graph showing the end-point values obtained for reactions shown in A. Plotted is the mean of duplicate reactions with the error bars representing the standard deviation around the mean.