

**Table 4.** Half-lives ( $\tau_{1/2}$ ) of aminoacyl-tRNAs at pH 7.5 calculated from the corresponding specific second-order rate constants (k) according to the equation  $\tau_{1/2} = \ln 2/(k(T)*[\text{OH}^-]\tau)$

Temperature (°C)	Phe-tRNA <sup>Phe</sup>	Ala-tRNA <sup>Ala</sup>
0	26.4 days	17.2 h
20	29.4 h	1.4 h
40	2.2 h	10.9 min
60	15.3 min	1.9 min
80	2.4 min	27 s
100	29 s	8 s