Table 3 Selected apparent second order rate constants for reaction of some biological oxidants with the free amino acid methionine

Data from [7, 28].

Reactant	Apparent second order rate constant ($M^{-1} \cdot s^{-1}$)
$HO^{\bullet}$	7×10^9
$CO_3^{-\bullet}$	1.2×10^8
HOCl	3.8×10^7
Singlet oxygen ($^1O_2$)	2×10^7
Ozone (O_3)	5×10^6
$CF_3CHClOO^{\bullet}$	1.4×10^6
$N_3^{\bullet}$	$<10^6$
$ONOO^-$/ONOOH	3.6×10^2
$O_2^{-\bullet}$	<0.3
H_2O_2	2×10^{-2}
$NO^{\bullet}$	Very slow

7 Davies, M.J. (2005) The oxidative environment and protein damage. Biochim. Biophys. Acta **1703**, 93–109 CrossRef PubMed

28 Buxton, G.V., Greenstock, C.L., Helman, W.P. and A.B., R. (1988) Critical review of rate constants for reactions of hydrated electrons, hydrogen atoms, and hydroxyl radicals ($\cdot OH/\cdot O^-$) in aqueous solution. J. Phys. Chem. Ref. Data **17**, 513–886 CrossRef