

Table 7 Efficiency of formation of hydroperoxides (number of hydroperoxide groups formed per $\text{HO}^\bullet \times 100$) on free amino acids (20 mM) exposed to 315 Gy of ^{60}Co γ -radiation at pH 7.4

Data from [135].

Amino acid	Peroxidation efficiency
Valine	49
Leucine	44
Proline	44
Isoleucine	43
Lysine	34
Glutamic acid	28
Tryptophan	18
Glutamine	16
Arginine	13
Alanine	11
Aspartic acid	6
Phenylalanine	5
Histidine	4
Glycine	3
Tyrosine	3
Asparagine	2
Hydroxyproline	2
Cysteine	0.4
Methionine	0
Serine	0
Threonine	0

- 135 Gebicki, S. and Gebicki, J.M. (1993) Formation of peroxides in amino acids and proteins exposed to oxygen free radicals. *Biochem. J.* **289**, 743–749 [CrossRef](#) [PubMed](#)