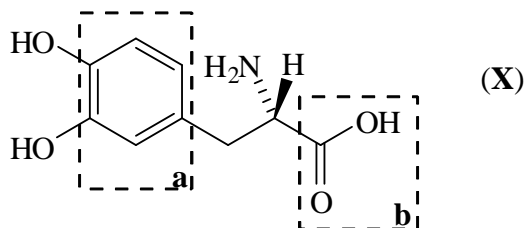


Marks
7

- wDopa is a non-proteinogenic amino acid used to treat Parkinson's disease. Only the enantiomer (**X**) is effective in restoring nerve function. The other enantiomer is highly toxic.



What is the molecular formula of (**X**)?

C₉H₁₁O₄N

Name the functional groups, highlighted by the boxes **a** and **b**, present in (**X**).

a = arene (aromatic ring)

b = carboxylic acid