## Amino acid residue and fragment ion mass values

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Residue | 3-letter | 1-letter | Mass | b1 ion | y1 ion | bn-1 ion |
| Alanine | Ala | A | 71.0371 | 72.0444 | 90.055 | 54.0338 |
| Cysteine | Cys | C | 102.0014 | 103.0086 | 121.0192 | 84.9981 |
| Asp. acid | Asp | D | 115.0269 | 116.0342 | 134.0448 | 98.0237 |
| Glu. acid | Glu | E | 129.0426 | 130.0499 | 148.0604 | 112.0393 |
| Phenylalanine | Phe | F | 147.0684 | 148.0757 | 166.0863 | 130.0651 |
| Glycine | Gly | G | 57.0215 | 58.0287 | 76.0393 | 40.0182 |
| Histidine | His | H | 137.0589 | 138.0662 | 156.0768 | 120.0556 |
| Isoleucine | Ile | I | 113.0841 | 114.0913 | 132.1019 | 96.0808 |
| Lysine | Lys | K | 128.095 | 129.1022 | 147.1128 | 111.0917 |
| Leucine | Leu | L | 113.0841 | 114.0913 | 132.1019 | 96.0808 |
| Methionine | Met | M | 131.0405 | 132.0478 | 150.0583 | 114.0372 |
| Asparagine | Asn | N | 114.0429 | 115.0502 | 133.0608 | 97.0396 |
| Proline | Pro | P | 97.0528 | 98.06 | 116.0706 | 80.0495 |
| Glutamine | Gln | Q | 128.0586 | 129.0659 | 147.0764 | 111.0553 |
| Arginine | Arg | R | 156.1011 | 157.1084 | 175.119 | 139.0978 |
| Serine | Ser | S | 87.032 | 88.0393 | 106.0499 | 70.0287 |
| Threonine | Thr | T | 101.0477 | 102.055 | 120.0655 | 84.0444 |
| Valine | Val | V | 99.0684 | 100.0757 | 118.0863 | 82.0651 |
| Tryptophan | Trp | W | 186.0793 | 187.0866 | 205.0972 | 169.076 |
| Tyrosine | Tyr | Y | 163.0633 | 164.0706 | 182.0812 | 146.06 |