14   Exercise solutions – Sequence patterns

1. **The PROSITE language**

   The PROSITE language represents protein sequence patterns.

   - x: An arbitrary amino acid
   - -: Separating elements
   - []: A list of amino acids
   - {}: A list of not accepted amino acids
   - (): A range of en element

   Find all matched sequences for the following patterns. Assume the alphabet M = {A, B, C}.

   (a) `A - [BC] - {BC}`

   > **Solution:**
   > `ABA, ACA`

   (b) `A - B(1, 2)`

   > **Solution:**
   > `AB, ABB`

   (c) `A - x - C`

   > **Solution:**
   > `AAC, ABC, ACC`