

## **Description of Additional Supplementary Files**

**File Name: Supplementary Data 1**

**Description:** DefenseFinder output, and descriptive statistics of each dataset analyzed in this work.

**File Name: Supplementary Data 2**

**Description:** Information regarding the asVip expression experiment.

**File Name: Supplementary Data 3**

**Description:** General information and alignments of the protein structures analysed in this work.

**File Name: Supplementary Data 4**

**Description:** Mapping files of the phylogenetic trees.

**File Name: Supplementary Data 5**

**Description:** Sequence and structural alignments used to generate the data.