

## **Description of Additional Supplementary Files**

**File Name: Supplementary Data 1**

**Description:** H3K36me3 interactors.

**File Name: Supplementary Data 2**

**Description:** PWWP2A IP-MS in HeLa.

**File Name: Supplementary Data 3**

**Description:** PWWP2A IP-MS in mESC.

**File Name: Supplementary Data 4**

**Description:** PWWP2B IP-MS in mESC.

**File Name: Supplementary Data 5**

**Description:** NGS summary.

**File Name: Supplementary Data 6**

**Description:** Mass spectrometry PRIDE summary.