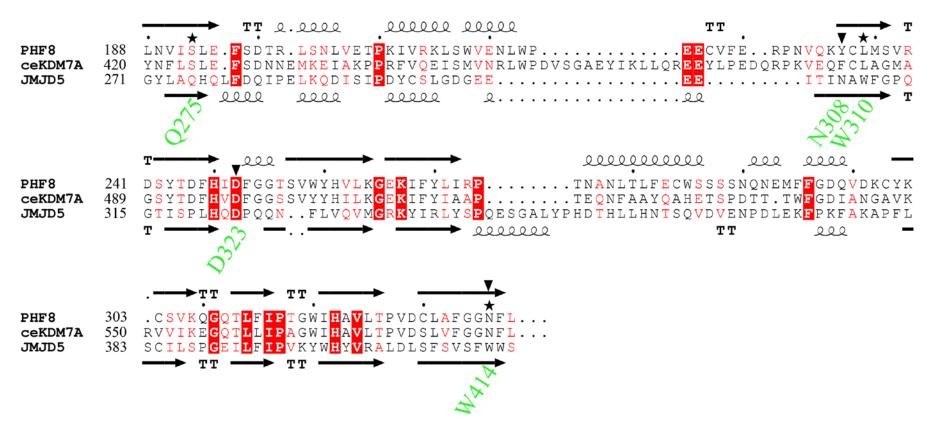
## Supplementary material:



**Figure S1. Structure based sequence alignment of PHF8, ceKDM7A and JMJD5**<sup>176-C</sup>. The residues responsible for blocking the entrance of methylated lysine residue in JMJD5<sup>176-C</sup> and residues involved in methylated lysine binding in PHF8 and ceKDM7A are marked by stars and triangle, respectively.