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HENMT1: an RNA methyltransferase in biology and disease

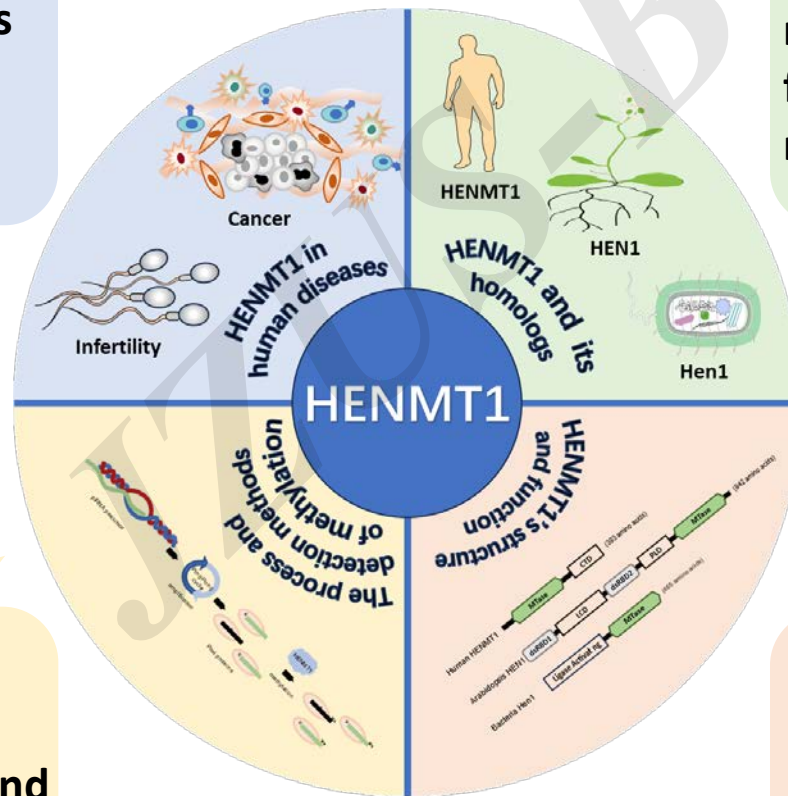
Key words: HEN methyltransferase 1 (HENMT1); RNA methyltransferase; 2'-*O*-Methylation; Tumor development; Infertility

Review Summary

This review mainly introduces HEN methyltransferase 1 (HENMT1) from the following four aspects:

- **Summary** of the latest research progress on HENMT1 protein in infertility and cancer development.

- **Introduction** to major HENMT1 homologs: from structural features to molecular functions.



- **Overview** of the methylation process catalyzed by HENMT1 and the corresponding detection methods.

- **Description** of the structure and function of HENMT1 across different species.

Review Summary

A series of figures and table were generated to elucidate the knowledge about HENMT1:

Figure 1 | Domain architecture of HENMT1 homologs and the process of 2'-O-methylation of piRNAs by HENMT1.

Figure 2 | HENMT1 expression in human tissues.

Figure 3 | HENMT1 expression in human tumor tissues and corresponding normal tissues.

Figure 4 | Association between HENMT1 expression and patient survival across various human cancers.

Figure 5 | HENMT1 involvement in immune cell infiltration across pan-cancer types.

Table 1 | HENMT1 homologs and their biological function.