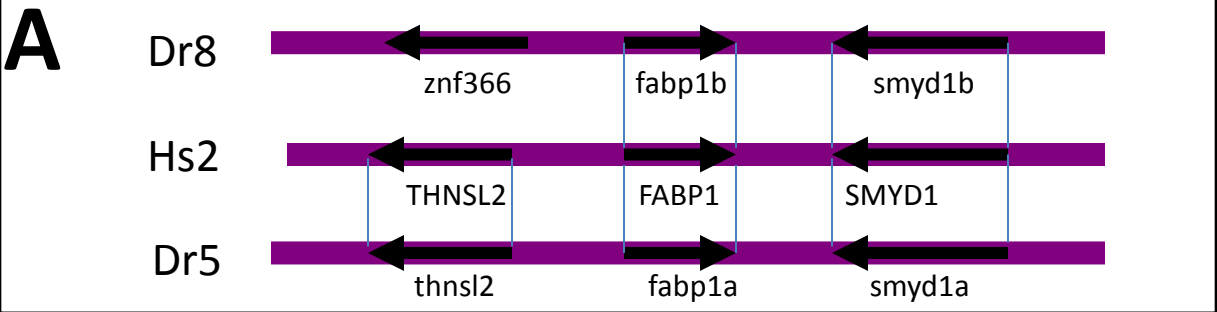


C

	52	90
ZF smyd1a	CHSCFRRQVNP	HRCAQCKFAHYCDRTCQRAAWDEHRKEC
ZF smyd1b	CHSCFRRQEKLQRCGQCRFAQYCDKTCQ	RAGWEEHKLEC
Fu smyd1	CHSCFRRQEKLQRC	SQCKFAHYCDRTCQ
Ch smyd1	CHTCFKRQERLHRCGQCKFAYYCDRTCQ	RDALNHNKNEC
Mo smyd1	CHTCFKRQEKLRHRCGQCKFAHYCDRTCQ	KDAWLNHNKNEC
Hu smyd1	CHTCFKRQEKLRHRCGQCKFAHYCDRTCQ	KDAWLNHNKNEC
Mo smyd3	CDRCLLGKEKLMRCSQCR	IAKYCSAKCQKKAWPDHRRREC
Hu smyd3	CDRCLLGKEKLMRCSQCR	VAKYCSAKCQKKAWPDHKREC
	* *	** ** = * ** ** = * **

D

	199	251
ZF smyd1a	PNLCLVNHDCWPNC	TVILNHGDQSALDASFHSSRRIELRALGKISEGEELTVSY
ZF smyd1b	PNLCLVNHDCWPNC	TVILNNGNQSAIDTVFHSQKRIELRALGKISAGEEVTVA
Fu smyd1	PNLCMVNHNCWPNC	TVILNHGNQSAVNTMFHSQRRRIELRSLGKIAEGEELTVAY
Ch smyd1	PNLCQANHDCWPNC	TVIFNNGNHEAVRSMFHTQMRIELRALSKISPGEELTVSY
Mo smyd1	PNLGLVNHDCWPNC	TVIFNNGNHEAVKSMFHTQMRIELRALGKISEGEELTVSY
Hu smyd1	PNLGLVNHDCWPNC	TVIFNNGNHEAVKSMFHTQMRIELRALGKISEGEELTVSY
Mo smyd3	PSMSLLNHSCDPNC	SIVFN-GPH-----LLLRAVREIEAGEELTICY
Hu smyd3	PSISLLNHSCDPNC	SIVFN GPH-----LLLRAVRDIEVGEELTICY
	* ** * ** = = * *	* ** = * ** = *

Figure S1. Structure comparison of zebrafish Smyd1a and Smyd1b

A. The synteny arrangement of zebrafish smyd1b and mouse smyd1 with fatty acid binding protein 1b (fabp1b) and threonine synthase like 2 (thnsl2) genes. **B.** The diagrams of zebrafish smyd1a genomic and protein structures. **C and D.** Sequence comparison of functional MYND (C) and SET (D) domains in Smyd1a and Smyd1b with other vertebrate Smyd1 and Smyd3 proteins. The identically conserved residues in the MYND and SET domains are indicated by the asterisk (*). The similar amino acid residues are indicated by =. ZF, zebrafish; Fu, fugu; Ch, chicken; Mo, mouse; Hu, human.