

# Phylogenetic and Expression Analysis of Fos Transcription Factors in Zebrafish

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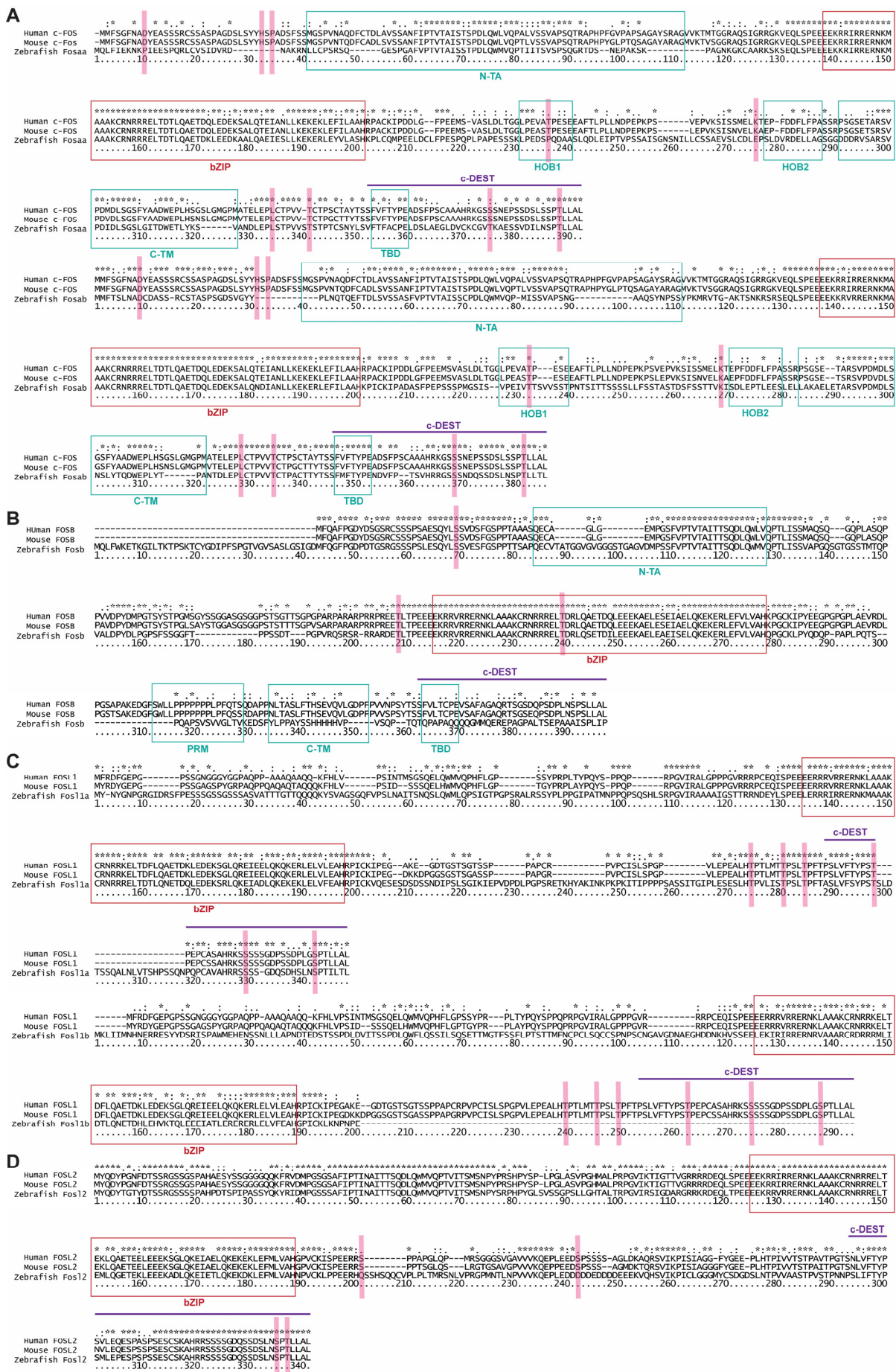
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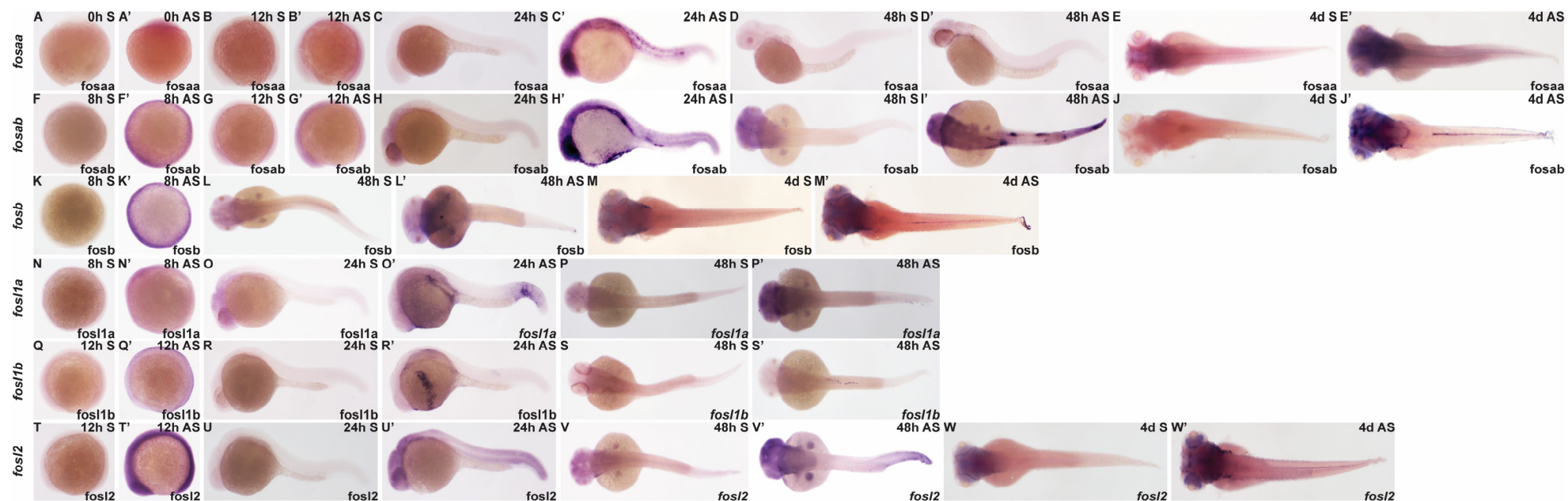
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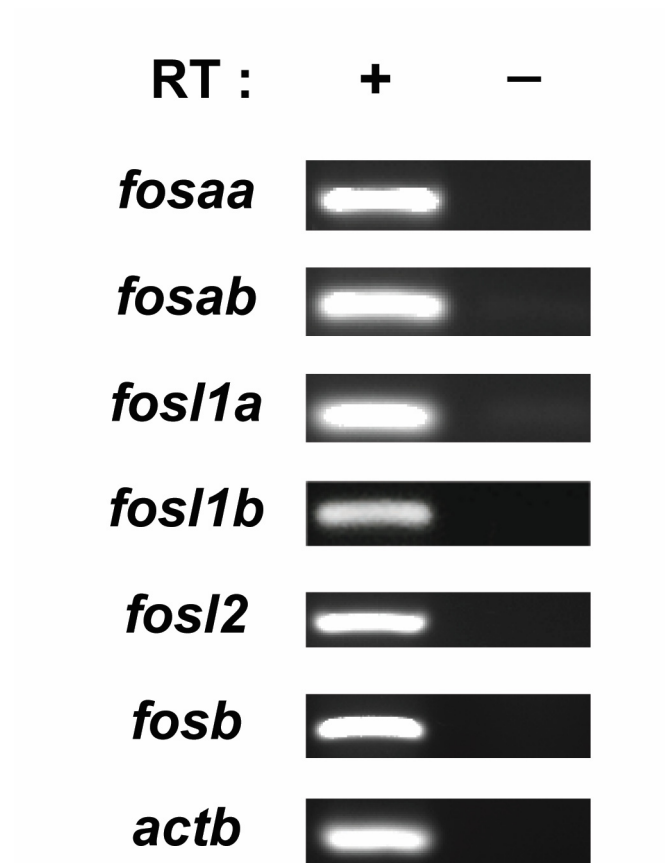
## Supplementary data



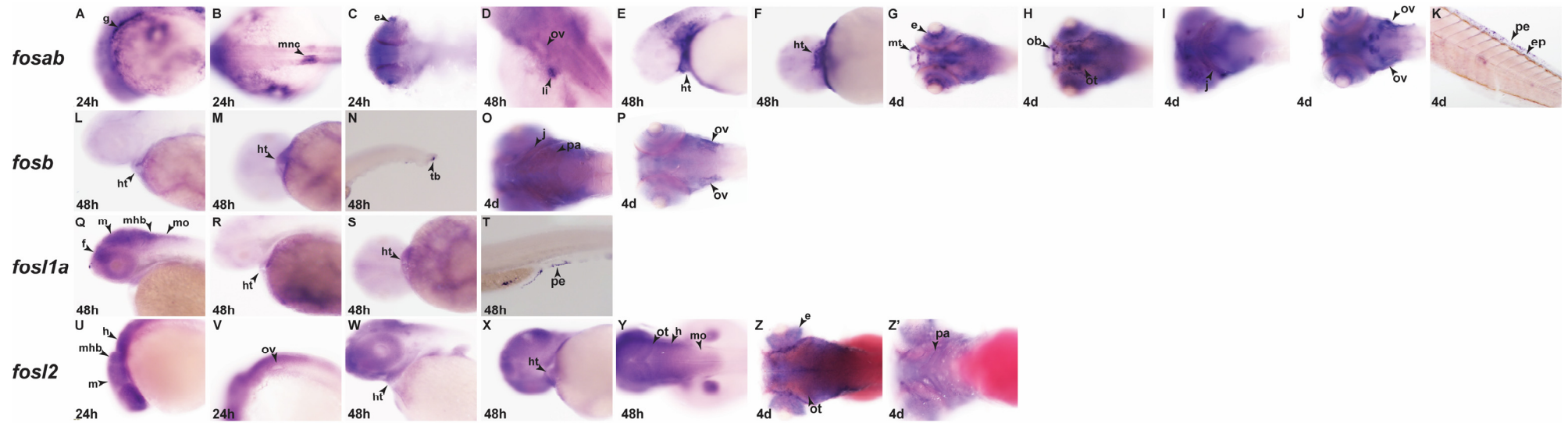
**Figure S1.** Multiple sequence alignment of mammalian and zebrafish proteins. Alignment of amino acid sequences of human, mouse and zebrafish FOS (A), FOSB (B), FOSL1 (C) and FOSL2 (D) proteins. Boxes and solid lines indicate key functional domains including N-TA, HOB1, HOB2, PRM, C-TM, TBD (blue box), bZIP domain (red box) and C-DEST domain (purple solid line). Pink solid lines on the sequences indicate previously identified regulatory phosphorylation sites.



**Figure S2:** Spatio-temporal expression of control probes (S) vs their respective specific gene expression probes (AS) during early and late zebrafish embryonic development. Lateral view of sense and anti-sense stained embryos showing expression for *fosaa* at 0 hpf (A-A'), 12 hpf (B-B'), 24 hpf (C-C'), 48 hpf (D-D') and 4 dpf (E-E'); *fosab* at 8 hpf (F-F'), 12 hpf (G-G'), 24 hpf (H-H'), 48 hpf (I-I') and 4 dpf (J-J'); *fosb* at 8 hpf (K-K'), 48 hpf (L-L') and 4 dpf (M-M'); *fosl1a* at 8 hpf (N-N'), 24 hpf (O-O') and 48 hpf (P-P'); *fosl1b* at 12 hpf (Q-Q'), 24 hpf (R-R') and 48 hpf (S-S'); and *fosl2* at 12 hpf (T-T'), 24 hpf (U-U'), 48 hpf (V-V') and 4 dpf (W-W').



**Figure S3:** Control RT-PCR reaction analysis of zebrafish *fos* genes by RT-PCR using total RNA from 5 dpf embryos with (+) and without (-) RT.



**Figure S4:** Magnified spatio-temporal expression of *fos* genes in specific organs or cell lineage of zebrafish embryos. Lateral, dorsal or frontal views of zebrafish embryos analysed by WISH showing expression of *fosab* at 24 hpf (A-C), 48 hpf (D-F) and 4 dpf (G-K); *fosb* at 48 hpf (L-N) and 4 dpf (O-P); *fosl1a* at 48 hpf (Q-T); and *fosl2* at 24 hpf (U-V), 48 hpf (W-Y) and 4 dpf (Z-Z'). e, eye; ep, epidermis; f, forebrain; g, gut; ht, heart; j, jaw; li, liver; m, midbrain; mhb, midbrain hindbrain barrier; mnc, migratory neural crest; mo, medulla oblongata; mt, mouth; ob, olfactory bulb; ot, optic tectum; ov, otic vesicle; pa, pharyngeal arch; pe, peridermis; tb, tailbud.