

**SUPPLEMENTARY MATERIAL**

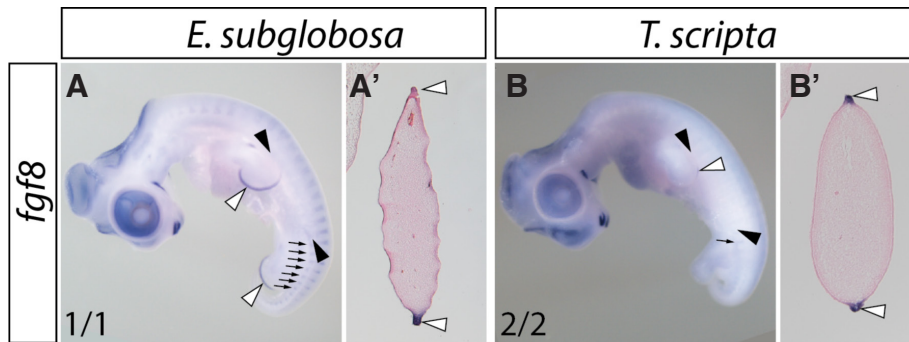
**corresponding to:**

**Comparative analysis of pleurodiran and cryptodiran turtle  
embryos depicts the molecular ground pattern  
of the turtle carapacial ridge**

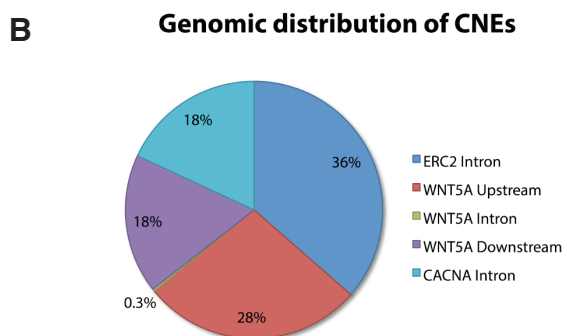
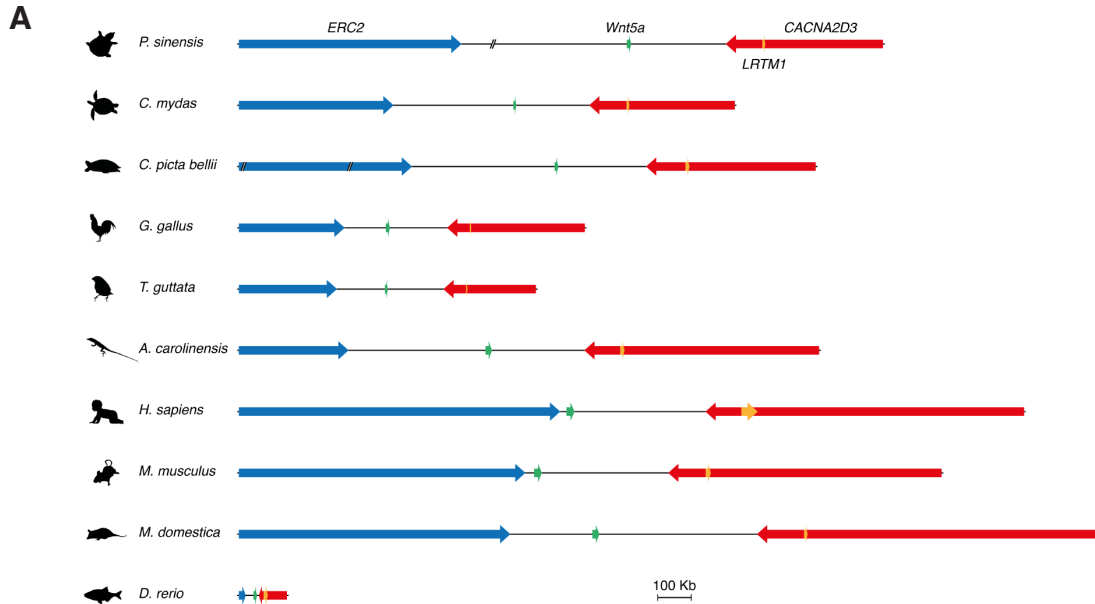
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**Fig. S1. *Fgf8* expression pattern in *Emydura subglobosa* and *Trachemys scripta* embryos at stage Y14.** Whole mount in situ hybridizations (A,B), and on section in situ hybridization at the level of a transversal section of the forelimbs (A',B') are shown. Expression in the apical ectodermal ridge of the limb bud is marked by white arrowheads. Black arrowheads depict the carapacial ridge position. Expression in the somites are marked by black arrows.



**Fig. S2. Comparative genomics of *Wnt5a* locus in vertebrates.** (A) Schematic representation of the genomic locus of *Wnt5a* in 10 different vertebrates. From top to bottom: *Pelodiscus sinensis* (base genome), *Chelonia mydas*, *Chrysemys picta bellii*, *Gallus gallus*, *Taenopygia guttata*, *Anolis carolinensis*, *Homo sapiens*, *Mus musculus*, *Monodelphis domestica*, *Danio rerio*. (B) Distribution percentages of the conserved non-coding elements in different genomic regions.

SUPPLEMENTARY TABLE S1

PRIMER SEQUENCES USED IN THIS STUDY, LENGTH OF PCR PRODUCTS AND ACCESSION NUMBERS (ENSEMBL OR GENBANK)

Gene	Forward primer (5' to 3')	Reverse primer (5' to 3')	Product length (bp)	Accession Number (Ensembl or GenBank)
<b><i>E. subglobosa</i></b>				
FGF8	AAGCTCAGGTAAGTCTTCAG	AGGAACTCAAAGCGTCTGTG	520	KP114658
Lef1	GATCAGCCACCCGGAGGAAG	AGTTATCTCTTGACAGACCAG	908/992*	KP114659
APCDD1	TCTGCAAACACCCACCTTT	CATGTCAGGCCAGGGATCAG	774	KP114660
Wnt5a	GAAGCCAGCTCTTGGTGGTC	CGACCACAGCACATGAGTTC	917	KP114661
<b><i>P. sinensis</i></b>				
FGF8	ACAGCATGTGAGGGAGCAG	CCCATGGCTACGTAGAGGAC	604	ENSPSIT00000009083
Lef1	AATGATCCCGTTCAAAGACG	GCTGCGCTCTTTCAGAGT	915	AB124566
APCDD1	AGGGTTCTGCCCTTCTTCAT	AGGTGGGGTGCTTACAGATG	948	AB124565
Wnt5a	AAGTGCTTTGGGACAGTTG	TTGAAACGGCTGTCACTTG	858	ENSPSIT00000003587
<b><i>T. scripta</i></b>				
FGF8	GGAGCCCTCCTCCTCAGTAT	GGCTGGAGTTTCGAGTCCTT	626	JW435770 <sup>#</sup>
Lef1	CCGGAGGAAGAAGGAGACTT	TGCATGTGTAGCTGCCTTTT	950	JW316636 <sup>#</sup>
APCDD1	AGGGTTCTGCCCTTCTTCAT	AGTGACCTTCCCAGGTGTTG	909	JW403666 <sup>#</sup>
Wnt5a	CTCTTTCGCCAGGTTGTAA	CTCCGCTGCACTGTCTTGA	973	JW314830 <sup>#</sup>

\*The different length is due to the absence/presence of an alternative spliced exon, respectively, found in different clones.

<sup>#</sup> KAPLINSKY, N.J., GILBERT, S.F., CEBRA-THOMAS, J., LILLEVALI, K., SAARE, M., CHANG, E.Y., EDELMAN, H.E., FRICK, M.A., GUAN, Y., HAMMOND, R.M. et al. (2013). The Embryonic Transcriptome of the Red-Eared Slider Turtle (*Trachemys scripta*). PLoS One 8: e66357.

SUPPLEMENTARY TABLE S2

GENOME DRAFT VERSION, SCAFFOLD OR CHROMOSOME NUMBERS, COORDINATES AND STRAND OF SEQUENCES USED FOR THE GENERATION OF THE VISTA PLOT

Species	Version	Scaffold/Chromosome	Start	End	Strand	Source
<i>Pelodiscus sinensis</i>	PelSin_1.0	JH210961.1	2629751	3392223	+	<a href="http://www.ensembl.org/Pelodiscus_sinensis">http://www.ensembl.org/Pelodiscus_sinensis</a>
		JH210532.1	3816337	4988134	-	
<i>Chelonia mydas</i>	CheMyd_1.0	scaffold61	209695	1701311	+	NCBI: KB566449
<i>Chrysemys picta bellii</i>	ChrPicBel3.0.1	JH584925.1	1	19367	-	<a href="http://pre.ensembl.org/Chrysemys_picta_bellii">http://pre.ensembl.org/Chrysemys_picta_bellii</a>
		JH584540.1	1	317930	+	
		JH584611.1	1245688	2666996	-	
<i>Gallus gallus</i>	Galgal4	Chromosome 12	7305503	8349033	-	<a href="http://www.ensembl.org/Gallus_gallus">http://www.ensembl.org/Gallus_gallus</a>
<i>Taeniopygia guttata</i>	taeGut3.2.4	Chromosome 12	7498636	8395826	-	<a href="http://www.ensembl.org/Taeniopygia_guttata">http://www.ensembl.org/Taeniopygia_guttata</a>
<i>Anolis carolinensis</i>	AnoCar2.0	Chromosome 2	160773402	162517276	-	<a href="http://www.ensembl.org/Anolis_carolinensis">http://www.ensembl.org/Anolis_carolinensis</a>
<i>Homo sapiens</i>	GRCh37	Chromosome 3	54151574	56507391	-	<a href="http://www.ensembl.org/Homo_sapiens">http://www.ensembl.org/Homo_sapiens</a>
<i>Mus musculus</i>	GRCm38	Chromosome 14	27617442	29726864	+	<a href="http://www.ensembl.org/Mus_musculus">http://www.ensembl.org/Mus_musculus</a>
<i>Monodelphis domestica</i>	BROADO5	Chromosome 6	279843750	282441386	+	<a href="http://www.ensembl.org/Monodelphis_domestica">http://www.ensembl.org/Monodelphis_domestica</a>
<i>Danio rerio</i>	Zv9	Chromosome 8	55868158	56021475	+	<a href="http://www.ensembl.org/Danio_rerio">http://www.ensembl.org/Danio_rerio</a>