

Supplementary figure IV

Comparison of human, mouse and hamster FXR sequences

The amino acid sequences of human, Syrian hamster and mouse FXR (NR1H4) were aligned and consensus coloring applied. Cyan, blue, grey, and white indicate decreasing levels of column-wise similarity scores calculated using the BLOSUM62 similarity matrix. The ligand binding domain (← LBD →) is highlighted.

HUMAN	MVMQFQGLEN	PIQISPHCS	TPSGFMTMM	SMKPAKGLT	EQVAGPLGQN	LEVEPYSQYS	60	
HAMSTER	MVMQRQGLEN	PVQVSLHSH	RLSGFVPTVM	SLKPAKGLT	EQEAGALGQN	LDLEAYSFYS	60	
MOUSE	MVMQFQGLEN	PIQISLHSH	RLSGFVPTGM	SVKPAKGLT	EHAAGPLGQN	LDLESYSFYN	60	
HUMAN	NVQFPQVQPQ	ISSSSYSNL	GFYPQQPEEW	YSPGIYELRR	MPAETLYQGE	TEVAEMPVTK	120	
HAMSTER	NVQFPQVQPQ	ISSSSYSNL	GFYPQQPEEW	YSPGIYELRR	MPAETVYQGE	TEVSEMPVTK	120	
MOUSE	NVPFPQVQPQ	ISSSSYSNL	GFYPQQPEDW	YSPGIYELRR	MPAETGYQGE	TEVSEMPVTK	120	
HUMAN	KPRMGASAG	RIKGDELCCV	CGDRASGYHY	NALTCEGCKG	FFRRSITKNA	VYKCKNGGNC	180	
HAMSTER	KPRMATAAAG	RIKGDELCCV	CGDRASGYHY	NALTCEGCKG	FFRRSITKNA	VYKRKNGGSC	180	
MOUSE	KPRMAAASAG	RIKGDELCCV	CGDRASGYHY	NALTCEGCKG	FFRRSITKNA	VYKCKNGGNC	180	
HUMAN	VMDMYMRRKC	QECRLRKCKE	MGMLAECMYT	GLLTEIQCKS	KRLRKNVKQH	ADQTVNE.DS	240	
HAMSTER	VMDMYMRRKC	QECRLRKCKE	MGMLAECMYT	GLLTEIQCKS	KRLRKNVKQH	ADKTVNE.DR	239	
MOUSE	VMDMYMRRKC	QECRLRKCKE	MGMLAECMYT	GLLTEIQCKS	KRLRKNVKQH	ADQTVNE.DS	240	
HUMAN	EGRDLRQVTS	TTKSCREKTE	LTPDQQTLLH	FIMDSYNKQR	MPQEITNKIL	KEEFSAEENF	300	
HAMSTER	EGRDLRQVTS	TTKSCREKTE	LTPDQQNLLD	YITDSYSKQR	MPQEITNKIL	KEEFSAEENF	299	
MOUSE	EGRDLRQVTS	TTKFCREKTE	LTADQQTLLD	YIMDSYNKQR	MPQEITNKIL	KEEFSAEENF	300	
<-----LBD----->								
HUMAN	LILTEMATNH	VQVLVEFTKK	LPGFQTLDE	DQIALKGS	VEAMFLRSAE	IFNKKLPSGH	360	
HAMSTER	LILTEMATSH	VQVLVEFTKK	LPGFQTLDE	DQIALKGS	VEAMFLRSAE	IFNKKLPAGH	359	
MOUSE	LILTEMATSH	VQILVEFTKK	LPGFQTLDE	DQIALKGS	VEAMFLRSAE	IFNKKLPAGH	360	
-----LBD-----								
HUMAN	SDLLEERIRN	SGISDEYITP	MFSFYKSGE	LKMTQEEYAL	LTAIVILSPD	RQYIKDREAV	420	
HAMSTER	ADLLEERIRN	SGISAEYITP	MFSFYKSGE	LKMTQEEYAL	LTAIVILSPD	RQYIKDREAV	419	
MOUSE	ADLLEERIRK	SGISDEYITP	MFSFYKSVGE	LKMTQEEYAL	LTAIVILSPD	RQYIKDREAV	420	
-----LBD-----								
HUMAN	EKLQEPLLDV	LQKLCKIHQP	ENPQHFACLL	GRLTELRTFN	HHHAEMLSW	RVNDHKFTPL	480	
HAMSTER	ERLQEPLLEV	LQKLCKIYQP	ENPQHFACLL	GRLTELRTFN	HHHAEMLSW	RVNDHKFTPL	479	
MOUSE	EKLQEPLLDV	LQKLCKMYQP	ENPQHFACLL	GRLTELRTFN	HHHAEMLSW	RVNDHKFTPL	480	
-----LBD----->								
HUMAN	LCEIWDVQ	488						488
HAMSTER	LCEIWDVQ	486						486
HAMSTER	LCEIWDVQ	487						487
MOUSE	LCEIWDVQ	488						488