Transcriptome profiling identifies a recurrent *CRYL1-IFT88* chimeric transcript in hepatocellular carcinoma

Supplementary Materials

Supplementary File: the full-length CRYL1-IFT88 fusion sequence obtained by 3′ and 5′ RACE experiments

The full-length CRYL1-IFT88 fusion transcript (779 bp)

> CRYL1-IFT88

GGCGCCGCGTCCCCGGCCCAACCATGGC
GTCCTCCGCGGCCGGCTGCGTGGTGATCGTTG
GCAGTGGAGTCATTGGGCGAAGCTGGGCCATG
CTGTTTGCCAGTGGAGGCTTCCAGGTGAAACT
CTATGACATTGAGCAACAGCAGATAAGGAACG
CCCTGGAAAACATCAGAAAGGAGATGAAGTTG
CTGGAGCAGGCAGGTTCTCTGAAAGGCTCCCT
GAGTGTGGAAGAGCAGCTGTCACTCATCAGTG
GTTGTCCCAATATCCAAGAAGCAGTAGAGGGT
GCCATGCACATTCAG|TAACATCAGAGATTTCATT
AAACCTGGAGGTTGAATTCATTTCGGAGTTCAAT
GATATGTCCAAAGAATCAGGTACTATAATCGTATAG
ACAACTCCTGTAATATATCCACAGTGCAAAATTAT
CCCCGTTTCCTGTCATTCCCTAGTGAGAAAAATCC
AACTGCAGACTTGACTGCCTTCGGTGAAGGCACA
CGGCAAATTCTTCTGAAAAATAATACCCTTCAAGA
TTGACTCTTCCCGTTTTACACAGCAATTGTCTCAG
CTTGGGACCAAAGTATTTACAAAGCAAGCAAACA
ACAGACTAGCGAACAGGGACACTTCTGAAGCTGG
TGATGCAGAAATCCACTGCCAAGCAGGGTGGGGG
GCCAGTCACCTCTCCTGGAATGTTCCATATGTAAG
CTGACACAACTTAACATCTTAAATACAGAATTCCA
ATCAAAAGAAAAGCAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAA

Note: Bold sequence was from CRYL1, and light sequence was from ITF88. The red sequence was the primer of 5′ and 3′ RACE experiments. Underline ATG and TAA were the start codon and stop codon. The breakpoint occurred in |TAA

The longest ORF predicted by NCBI ORF-finder (279 bp)

> CRYL1-IFT88 ORF

ATGGCGTCCTCCGCGGCCGGCTGCGTGGTGA
TCGTTGGCAGTGGAGTCATTGGGCGAAGCTGGGC
CATGCTGTTTGCCAGTGGAGGCTTCCAGGTGAAA
CTCTATGACATTGAGCAACAGCAGATAAGGAACG
CCCTGGAAAACATCAGAAAGGAGATGAAGTTGC
TGGAGCAGGCAGGTTCTC**TGAAAGGCTCCCTGA**
GTGTGGAAGAGCAGCTGTCACTCATCAGTGGTTG
TCCCAATATCCAAGAAGCAGTAGAGGGTGCCATG
CACATTCAGTAA

The predicted AA sequence (92 aa)

> CRYL1-IFT88 aa

MASSAAGCVVIVGSGVIGRSWAMLFASGGFQ
VKLYDIEQQQIRNALENIRKEMKLLEQAGSLKGSLS
VEEQLSLISGCPNIQEAVEGAMHIQ

The CRYL1-IFT88 function domain predicted by NCBI CD-Search

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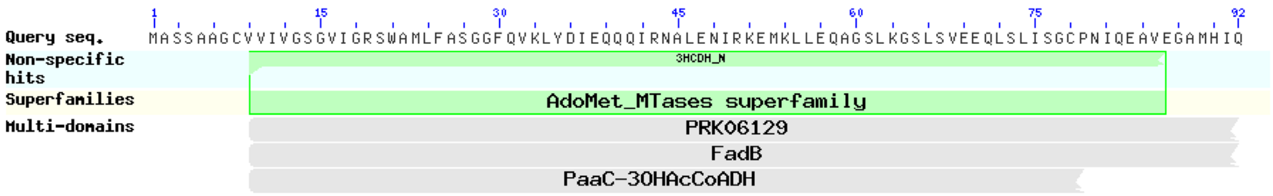
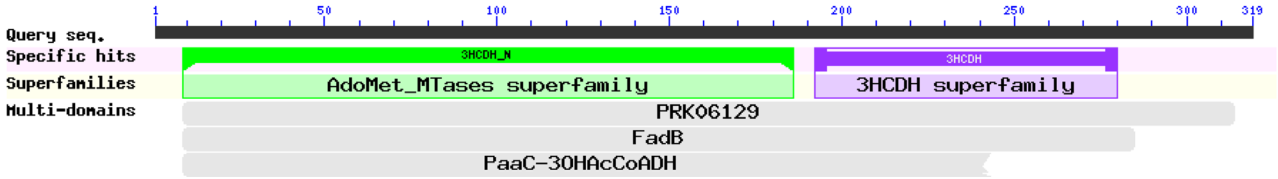
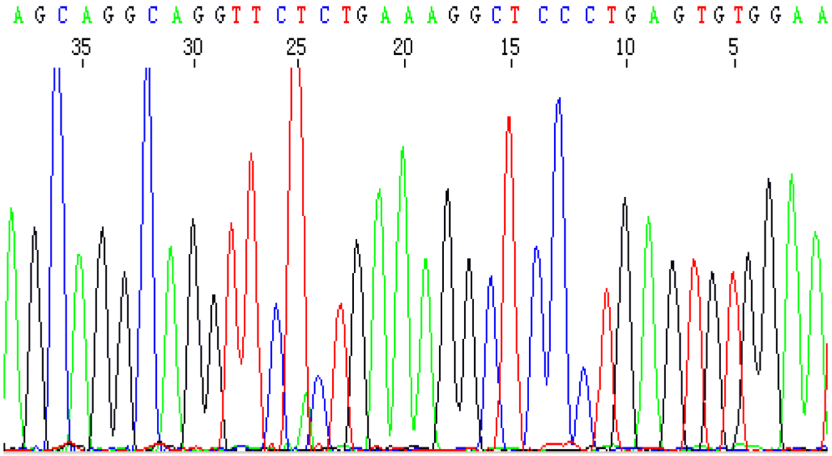


The CRYL1 function domain predicted by NCBI CD-Search

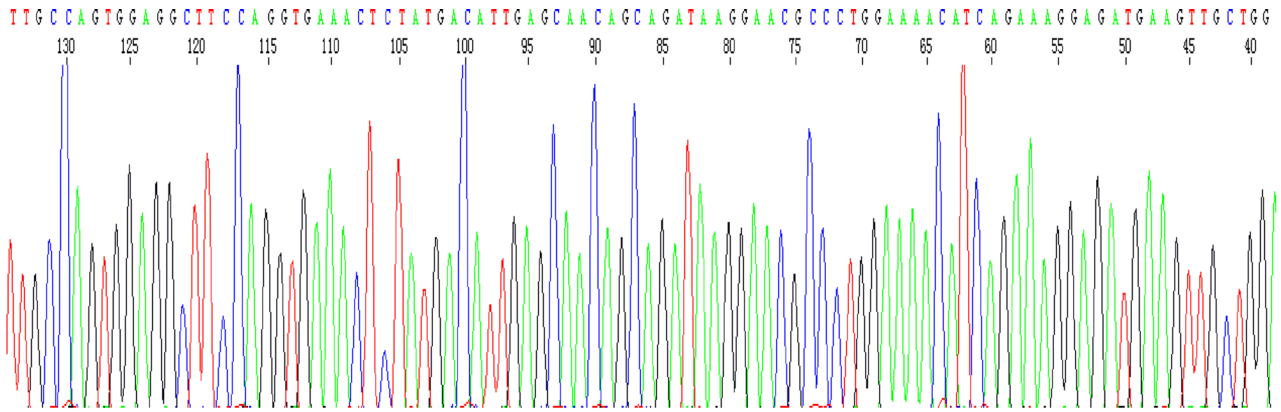


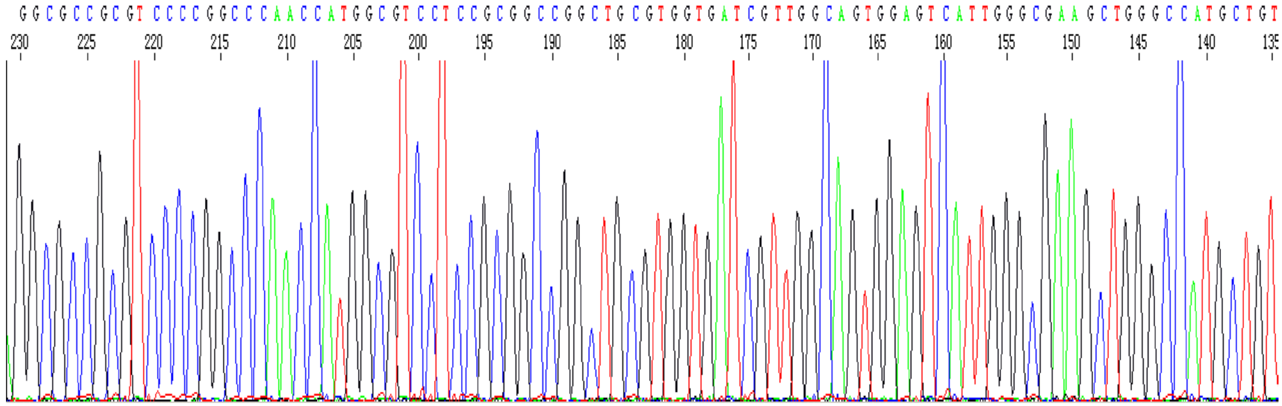
The CRYL1 function domain predicted by NCBI CD-Search

5’ RACE PCR production sequences:



5’ RACE PCR production sequences:





3′ RACE production sequences:

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