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Product datasheet for RC220798

ZIC2 (NM_007129) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZIC2 (NM_007129) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZIC2
Synonyms:	HPE5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC220798 representing NM_007129
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTCCTGGACGCGGGTCCGCAGTTCCCGGCCATCGGGGTGGGCAGCTTCGCGCGCCACCATCACCACT
CCGCCGCGGCGGCGGCGGCGGCTGCCGCCGAGATGCAGGACCGTGAACTGAGCCTGGCGGCGGCGCAGAA
CGGCTTCGTTGACTCCGCCGCCGCGCACATGGGAGCCTTCAAGCTCAACCCGGGCGCGCACGAGCTGTCC
CCGGGCCAGAGCTCGGCGTTCACGTCGCAGGGCCCCGGCGCCTACCCCGGCTCCGCTGCGGCTGCCGCTG
CGGCCGCAGCGCTCGGGCCCCACGCCGCGCACGTTGGCTCCTACTCTGGGCCGCCCTTCAACTCCACCCG
GGACTTCCTGTTCCGCAGCCGCGGCTTCGGGGACTCGGCGCCGGGCGGCGGGCAGCACGGGCTGTTCGGG
CCGGGCGCGGGCGGCCTGCACCACGCGCACTCGGACGCGCAGGGCCACCTCCTCTTCCCGGGCCTGCCAG
AGCAGCACGGGCCGCACGGCTCGCAGAATGTGCTCAACGGGCAGATGCGCCTCGGGCTGCCCGGCGAGGT
GTTCGGGCGCTCGGAGCAATACCGCCAGGTGGCCAGCCCGCGGACCGACCCCTACTCGGCGGCGCAACTC
CACAACCAGTACGGCCCCATGAATATGAACATGGGTATGAACATGGCAGCAGCCGCGGCCCACCACCACC
ACCACCACCACCACCACCCCGGTGCCTTTTTCCGCTATATGCGGCAGCAGTGCATCAAGCAGGAGCTAAT
CTGCAAGTGGATCGACCCCGAGCAACTGAGCAATCCCAAGAAGAGCTGCAACAAAACTTTCAGCACCATG
CACGAGCTGGTGACACACGTCTCGGTGGAGCACGTCGGCGGCCCGGAGCAGAGCAACCACGTCTGCTTCT
GGGAGGAGTGTCCGCGCGAGGGCAAGCCCTTCAAGGCCAAATACAAACTGGTCAACCACATCCGCGTGCA
CACAGGCGAGAAACCCTTCCCCTGCCCCTTCCCGGGCTGTGGCAAAGTCTTCGCGCGCTCCGAGAACCTC
AAGATCCACAAAAGGACCCACACAGGGGAGAAGCCGTTCCAGTGTGAGTTTGAGGGCTGCGACCGGCGCT
TCGCCAACAGCAGCGACAGGAAGAAGCACATGCACGTCCACACCTCCGATAAGCCCTATCTCTGCAAGAT
GTGCGACAAGTCCTACACGCACCCCAGCTCGCTGCGGAAGCACATGAAGGTCCATGAGTCCTCCCCGCAG
GGCTCTGAATCCTCCCCGGCCGCCAGCTCCGGCTATGAGTCGTCCACGCCCCCGGGGCTGGTGTCCCCCA
GCGCCGAGCCCCAGAGCAGCTCCAACCTGTCCCCAGCGGCGGCGGCAGCGGCGGCGGCGGCTGCGGCGGC
GGCGGCCGCGGTGTCCGCGGTGCACCGGGGCGGAGGCTCGGGCAGTGGCGGCGCGGGAGGCGGCTCAGGC
GGCGGCAGCGGCAGTGGCGGGGGCGGCGGCGGGGCGGCGGCGGGGGCGGCGGCAGCTCTGGCGGGGGCA
GCGGGACAGCCGGGGGTCACAGCGGCCTCTCCTCCAACTTCAATGAATGGTACGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220798 representing NM_007129
Red=Cloning site Green=Tags(s)

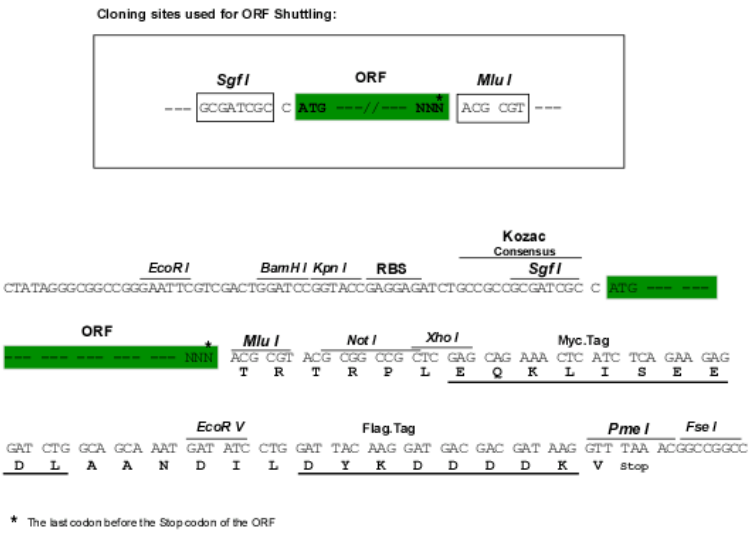
MLLDAGPQFPAIGVGSFARHHHHSAAAAAAAAAEMQDRELSLAAAQNGFVDSAAAHMGAFKLNPGAHELS
PGQSSAFTSQGPGAYPGSAAAAAAAAALGPHAAHVGSYSGPPFNSTRDFLFRSRGFGDSAPGGGQHGLFG
PGAGGLHHAHSDAQGHLLFPGLPEQHGPHGSQNVLNGQMRLGLPGEVFGRSEQYRQVASPRTDPYSAAQL
HNQYGPMNMNMGMNMAAAAAHHHHHHHHHPGAFFRYMRQQCIKQELICKWIDPEQLSNPKKSCNKTFSTM
HELVTHVSVEHVGGPEQSNHVCFWEECPREGKPFKAKYKLVNHIRVHTGEKPFPCPFPGCGKVFARSENL
KIHKRTHTGEKPFQCEFEGCDRRFANSSDRKKHMHVHTSDKPYLCKMCDKSYTHPSSLRKHMKVHESSPQ
GSESSPAASSGYESSTPPGLVSPSAEPQSSSNLSPAAAAAAAAAAAAAAAAVSAVHRGGGSGSGGAGGGSG
GGSGSGGGGGGAGGGGGSSGGGSGTAGGHSGLSSNFNEWYV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2913_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007129

ORF Size: 1596 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM_007129.5

RefSeq Size: 2698 bp

RefSeq ORF: 1599 bp

Locus ID: 7546

UniProt ID: O95409

Cytogenetics: 13q32.3

Domains: zf-C2H2

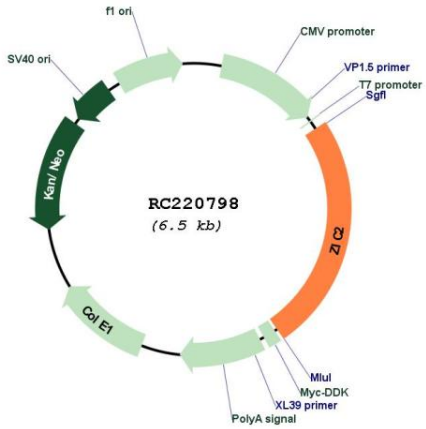
Protein Families: Druggable Genome

Protein Pathways: Hedgehog signaling pathway

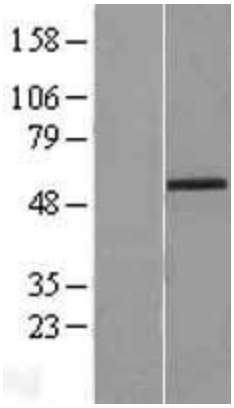
MW: 54.8 kDa

Gene Summary: This gene encodes a member of the ZIC family of C2H2-type zinc finger proteins. This protein functions as a transcriptional repressor and may regulate tissue specific expression of dopamine receptor D1. Expansion of an alanine repeat in the C-terminus of the encoded protein and other mutations in this gene cause holoprosencephaly type 5. Holoprosencephaly is the most common structural anomaly of the human brain. A polyhistidine tract polymorphism in this gene may be associated with increased risk of neural tube defects. This gene is closely linked to a gene encoding zinc finger protein of the cerebellum 5, a related family member on chromosome 13. [provided by RefSeq, Jul 2016]

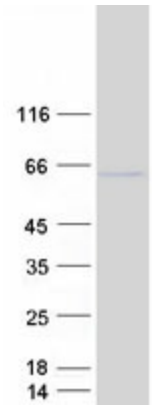
Product images:



Circular map for RC220798



Western blot validation of overexpression lysate (Cat# [LY416175]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220798 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ZIC2 protein (Cat# [TP320798]). The protein was produced from HEK293T cells transfected with ZIC2 cDNA clone (Cat# RC220798) using MegaTran 2.0 (Cat# [TT210002]).