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Product datasheet for RC230256

DGCR2 (NM_001184781) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DGCR2 (NM_001184781) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DGCR2
Synonyms:	DGS-C; IDD; LAN; SEZ-12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC230256 representing NM_001184781
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGCCCAAGGCAGACAGCGGCGCCTTCCTGCTGCTCTTCCTGCTCGTGCTCACTGTCACCGAGCCGC
TGCGGCCAGAGCTGCGGTGCAACCCTGGGCAGTTTGCGTGTCGCAGCGGCACCATCCAGTGCATCCCCCT
CCCCTGGCAGTGTGACGGCTGGGCGACTTGCGAGGATGAGAGCGACGAAGCCAACTGTCCAGAAGTGACC
GGGGAGGTGCGTCCTCATCATGGGAAGGAGGCTGTGGATCCGCGGCAGGGGCGGGCCAGAGGAGGCGACC
CTTCGCACTTCCACGCGGTGAACGTGGCGCAGCCCGTTCGCTTCAGCAGGAAGTGCCCGACAGGGTGGCA
CCACTACGAAGGCACGGCCAGCTGCTACCGGGTCTACCTGAGCGGGGAGAACTACTGGGATGCCGCGCAG
ACCTGCCAGCGCCTGAATGGCTCTCTCGCCACCTTCTCCACTGACCAGGAGCTGCGCTTTGTCCTGGCCC
AGGAATGGGACCAGCCCGAGCGGAGCTTTGGTTGGAAGGACCAGCGCAAGTTGTGGGTTGGCTATCAGTA
TGTTATCACTGGCCGGAACCGCTCCTTGGAAGGTCGCTGGGAGGTGGCATTCAAAGGCTCTTCAGAGGTG
TTCCTGCCCCCAGACCCCATCTTTGCCTCGGCCATGTCTGAGAACGACAACGTGTTCTGTGCCCAGCTTC
AGTGCTTCCATTTCCCCACCCTGCGGCACCACGACCTCCACAGCTGGCACGCCGAGAGCTGCTACGAGAA
GTCTTCATTTCTGTGTAAAAGAAGTCAAACATGTGTTGACATCAAGGACAACGTGGTGGATGAAGGGTTC
TACTTCACCCCTAAGGGGGACGACCCATGCCTGAGCTGCACCTGCCATGGAGGGGAGCCTGAGATGTGTG
TGGCTGCTCTCTGTGAGAGGCCCCAGGGCTGCCAACAGTACCGCAAGGACCCCAAAGAGTGCTGCAAGTT
CATGTGTCTGGACCCAGATGGCAACAGTCTGTTTGACTCCATGGCCAGCGGGATGCGCCTGGTCGTCAGC
TGCATCTCCTCCTTCCTCATCCTGTCACTGCTGCTCTTCATGGTCCACCGGCTGCGCCAGCGGCGCCGGG
AGCGCATCGAGTCCCTGATTGGAGCAAACTTGCACCACTTCAACCTCGGCCGCAGGATCCCTGGCTTTGA
TTACGGCCCAGACGGGTTTGGCACGGGCCTCACGCCGCTGCATCTTTCTGACGACGGAGAGGGTGGGACT
TTCCATTTCCACGACCCTCCACCTCCCTACACGGCATACAAGTACCCGGACATCGGCCAGCCCGACGACC
CTCCGCCGCCCTACGAGGCCTCCATCCACCCGGACAGTGTGTTCTATGACCCTGCAGACGATGATGCTTT
TGAGCCTGTGGAGGTCAGCCTGCCAGCCCCTGGGGATGGTGGGAGTGAAGGTGCATTACTCCGGCGCCTG
GAGCAGCCTCTGCCCACTGCGGGGGCCTCTCTGGCAGACCTGGAAGACTCTGCCGACAGCAGCAGCGCCC
TGCTCGTGCCCCCTGACCCTGCCCAGAGCGGGAGCACCCCAGCTGCAGAGGCACTGCCAGGGGGTGGCCG
CCACAGCCGCAGCTCCCTCAATACTGTGGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC230256 representing NM_001184781
Red=Cloning site Green=Tags(s)

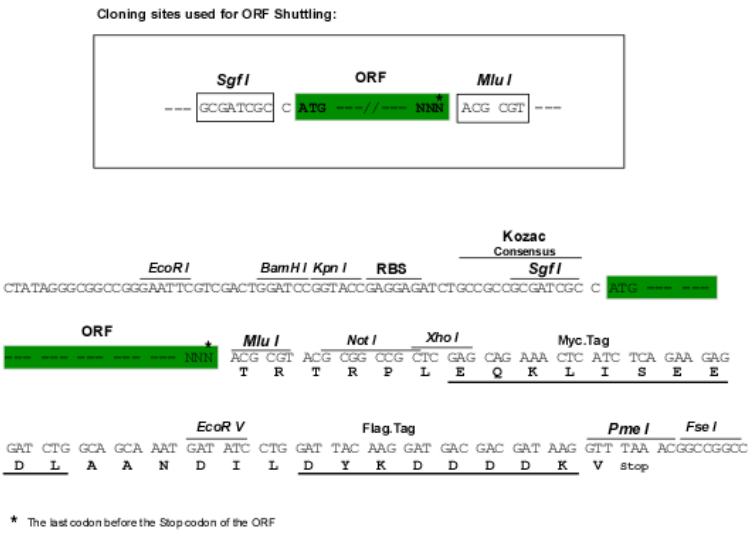
MVPKADSGAFLLLFLLVLTVTEPLRPELRCNPGQFACRSGTIQCIPLPWQCDGWATCEDESDEANCPEVT
GEVRPHHGKEAVDPRQGRARGGDPSHFHAVNVAQPVRFSRKCPTGWHHYEGTASCYRVYLSGENYWDAAQ
TCQRLNGSLATFSTDQELRFVLAQEWDQPERSFGWKDQRKLWVGYQYVITGRNRSLEGRWEVAFKGSSEV
FLPPDPIFASAMSENDNVFCAQLQCFHFPTLRHHDLHSWHAESCYEKSSFLCKRSQTCVDIKDNVVDEGF
YFTPKGDDPCLSCTCHGGEPEMCVAALCERPQGCQQYRKDPKECCKFMCLDPDGNSLFDSMASGMRLVVS
CISSFLILSLLLFMVHRLRQRRRERIESLIGANLHHFNLGRRIPGFDYGPDGFGTGLTPLHLSDDGEGGT
FHFHDPPPPYTAYKYPDIGQPDDPPPPYEASIHPDSVFYDPADDDAFEPVEVSLPAPGDGGSEGALLRRL
EQPLPTAGASLADLEDSADSSSALLVPPDPAQSGSTPAAEALPGGGRHSRSSLNTVV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8066_f08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001184781

ORF Size: 1641 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_001184781.2

RefSeq ORF: 1644 bp

Locus ID: 9993

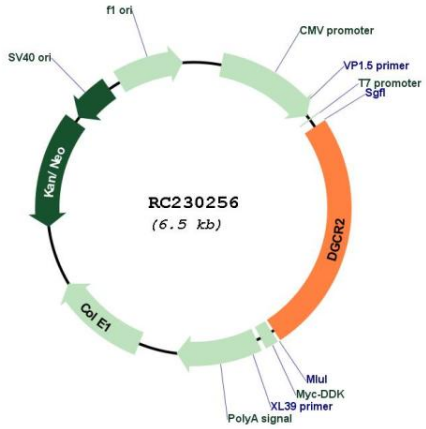
Cytogenetics: 22q11.21

Protein Families: Druggable Genome, Transmembrane

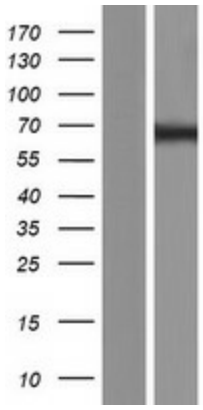
MW: 61 kDa

Gene Summary: Deletions of the 22q11.2 have been associated with a wide range of developmental defects (notably DiGeorge syndrome, velocardiofacial syndrome, conotruncal anomaly face syndrome and isolated conotruncal cardiac defects) classified under the acronym CATCH 22. The DGCR2 gene encodes a novel putative adhesion receptor protein, which could play a role in neural crest cells migration, a process which has been proposed to be altered in DiGeorge syndrome. Alternative splicing results in multiple transcript variants.[provided by RefSeq, May 2010]

Product images:



Circular map for RC230256



Western blot validation of overexpression lysate (Cat# [LY433256]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230256 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).