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Product datasheet for RC213641

Pannexin 2 (PANX2) (NM_052839) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pannexin 2 (PANX2) (NM_052839) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pannexin 2
Synonyms:	hPANX2; PX2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC213641 representing NM_052839
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCACCACCTCCTGGAGCAGTCGGCGGACATGGCGACCGCGCTGCTGGCGGGAGAGAAGCTGCGGGAGC
TGATCCTGCCGGGCGCGCAGGACGACAAGGCGGGCGCGCTGGCCGCGCTGCTTCTGCAGCTGAAGCTGGA
GCTGCCGTTCGACCGGGTGGTCACCATCGGCACCGTGCTGGTGCCCATCCTGCTGGTCACCCTGGTCTTC
ACCAAGAACTTCGCAGAGGAACCCATTTACTGTTACACCCCGCACAACTTCACGCGCGACCAGGCGCTGT
ACGCCCGCGGCTACTGCTGGACGGAGCTGCGGGACGCGCTGCCCGGCGTGGACGCCAGCCTGTGGCCGTC
GCTGTTTGAGCACAAGTTCCTGCCCTACGCGCTGCTGGCCTTCGCCGCCATCATGTACGTGCCCGCGCTG
GGCTGGGAGTTCCTGGCCTCCACGCGCCTCACCTCCGAGCTCAACTTCCTGCTGCAGGAGATCGACAACT
GTTACCACCGGGCGGCCGAGGGCCGCGCGCCCAAGATCGAGAAGCAGATCCAGTCCAAGGGCCCGGGCAT
CACGGAGCGCGAGAAGCGCGAGATCATCGAGAACGCGGAGAAGGAGAAGAGCCCGGAGCAGAACCTGTTC
GAGAAGTACCTGGAGCGCCGCGGCCGCAGCAACTTCCTGGCCAAGCTGTACCTGGCGCGGCACGTGCTGA
TCCTGCTGCTGAGCGCCGTGCCCATCTCCTACCTGTGCACCTACTACGCCACGCAGAAGCAGAACGAGTT
CACCTGCGCGCTGGGCGCGTCCCCGGACGGGGCGGCAGGTGCGGGGCCCGCGGTGCGCGTGAGCTGCAAG
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TCATCCTCGTCAACCTCATCCACCTCTTCATCTTCCGCAAGAGCAACTTCATCTTCGACAAGCTGCACAA
GGTGGGCATCAAGACGCGCCGGCAGTGGCGCCGCTCGCAGTTCTGCGACATCAACATCCTGGCCATGTTC
TGCAACGAGAACCGCGACCACATCAAGTCGCTCAACCGGCTGGACTTCATCACCAACGAGAGCGACCTCA
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CCTCGGGGGGCCCGTTCCACGTCCGCTCACCTCCCGCCGCCCCTGCTGTGGCCCCTCTGACACCAGCCAG
CCTGGGCAAGGCGGAGCCCCTCACCATCCTGAGCCGAAACGCCACACACCCGCTGCTGCACATCAACACG
CTGTACGAGGCCCGGGAGGAGGAGGACGGGGGCCCCCGCCTGCCGCAGGACGTGGGGGACCTCATCGCCA
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T

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213641 representing NM_052839
Red=Cloning site Green=Tags(s)

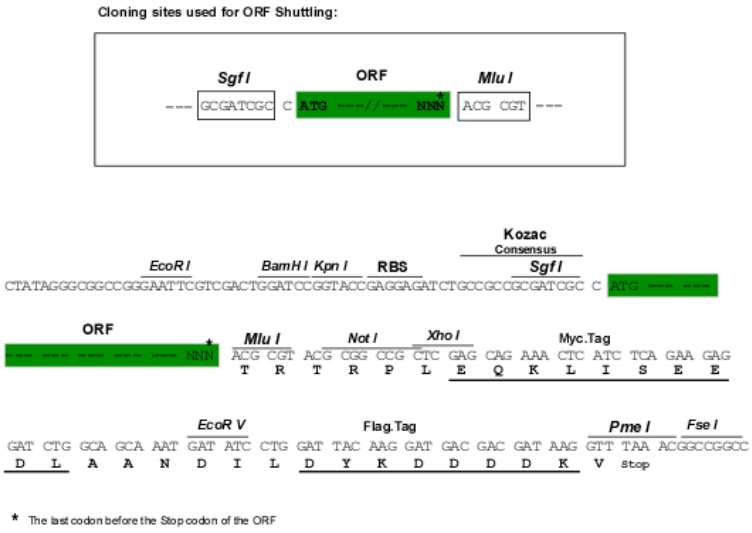
MHHLLEQSADMATALLAGEKLRELILPGAQDDKAGALAALLLQLKLELPFDRVVTIGTVLVPILLVTLVF
TKNFAEEPIYCYTPHNFTRDQALYARGYCWTELRDALPGVDASLWPSLFEHKFLPYALLAFAAIMYVPAL
GWEFLASTRLTSELNFLLQEIDNCYHRAAEGRAPKIEKQIQSKGPGITEREKREIIENAEKEKSPEQNLF
EKYLERRGRSNFLAKLYLARHVLILLLSAVPISYLCTYYATQKQNEFTCALGASPDGAAGAGPAVRVSCK
LPSVQLQRIIAGVDIVLLCVMNLIILVNLIHLFIFRKSNFIFDKLHKVGIKTRRQWRRSQFCDINILAMF
CNENRDHIKSLNRLDFITNESDLMYDNVVRQLLAALAQSNHDATPTVRDSGVQTVDPSANPAEPDGAAEP
PVVKRPRKKMKWIPTSNPLPQPFKEPLAIMRVENSKAEKPKPARRKTATDTLIAPLLDRSAHHYKGGGGD
PGPGPAPAPAPPPAPDKKHARHFSLDVHPYILGTKKAKAEAVPAALPASRSQEGGFLSQAEDCGLGLAPA
PIKDAPLPEKEIPYPTEPARAGLPSGGPFHVRSPPAAPAVAPLTPASLGKAEPLTILSRNATHPLLHINT
LYEAREEEDGGPRLPQDVGDLIAIPAPQQILIATFDEPRTVVSTVEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8011_f11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_052839

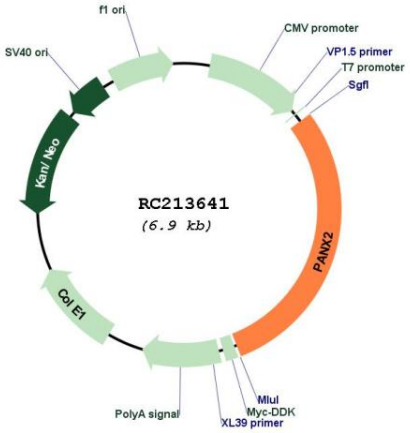
ORF Size: 2031 bp

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

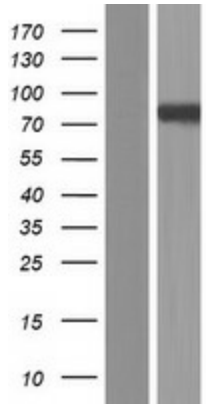
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_052839.4
RefSeq Size:	3069 bp
RefSeq ORF:	2034 bp
Locus ID:	56666
UniProt ID:	Q96RD6
Cytogenetics:	22q13.33
Protein Families:	Transmembrane
MW:	74.3 kDa
Gene Summary:	The protein encoded by this gene belongs to the innexin family. Innexin family members are the structural components of gap junctions. This protein and pannexin 1 are abundantly expressed in central nervous system (CNS) and are coexpressed in various neuronal populations. Studies in Xenopus oocytes suggest that this protein alone and in combination with pannexin 1 may form cell type-specific gap junctions with distinct properties. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009]

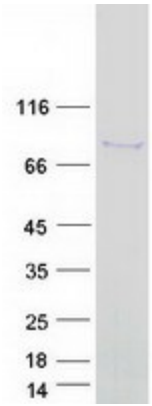
Product images:



Circular map for RC213641



Western blot validation of overexpression lysate (Cat# [LY409450]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213641 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PANX2 protein (Cat# [TP313641]). The protein was produced from HEK293T cells transfected with PANX2 cDNA clone (Cat# RC213641) using MegaTran 2.0 (Cat# [TT210002]).