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Product datasheet for RC200120

CNDP2 (NM_018235) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CNDP2 (NM_018235) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CNDP2
Synonyms:	CN2; CPGL; HEL-S-13; HsT2298; PEPA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200120 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCCCTCACTACCCTGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAA
AATGGGTGGCTATCCAGAGTGTGTCTGCGTGGCCGGAGAAGAGAGGCGAAATCAGGAGGATGATGGAAGT
TGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCGGAAAACAAAAGCTCCCT
GATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGCTGGGCTCCGACCCACAGAAGAAGACCG
TGTGCATTTACGGGCACCTGGATGTGCAGCCTGCAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCAC
CCTGGTGGAGCGAGACGGCAAGCTGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGG
ATAAACGCCCTGGAAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAG
GCATGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCTTTAAGGA
TGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTACGGCCTC
AGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACAAAGACCTCCATTCTGGGGTGTACGGGG
GCTCGGTGCATGAGGCCATGACTGATCTCATTTTGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACAT
CCTGATCCCCGGCATTAACGAGGCCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATC
GACTTTGACATAGAGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACA
TCCTCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTGGGTCTGG
GGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCGTGCCGAACATGACTCCT
GAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTGAACTACGCAGCCCCAATGAGT
TCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGG
GAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTG
ACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAG
CCCACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCGCGTACCT
GTATGAGGTCTCCCAGCTGAAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200120 protein sequence
Red=Cloning site Green=Tags(s)

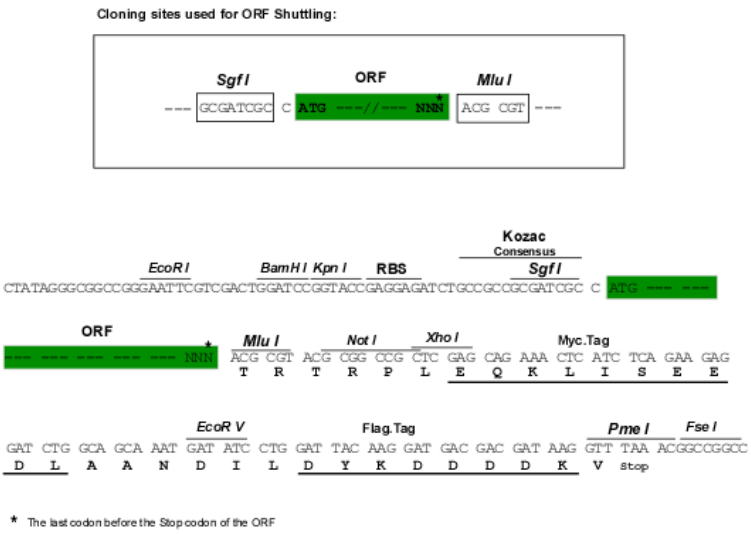
MAALTTLFKYIDENQDRYIKKLAKWVAIQSVSAWPEKRGEIRRMMEVAAADVKQLGGSVELVDIGKQKLP
DGSEIPLPPILLGRLGSDPQKKTVCIYGHLDVQPAALEDGWDSEPFTLVERDGKLYGRGSTDDKGPVAGW
INALEAYQKTGQEIPVNVRFCLEGMEESGSEGLDELIFARKDTFFKDVDYVCISDNYWLGKKKPCITYGL
RGICYFFIEVECSNKDLHSGVYGGSVHEAMTDLILLMGSLVDKRGNILIPGINEAVAAVTEEEHKLYDDI
DFDIEEFAKDVGAQILLHSHKKDILMHRWRYPSLSLHGIEGAFSGSGAKTVIPRKVVGKFSIRLVPNMTP
EVVGEQVTSYLTKKFAELRSPNEFKVYMGHGGKPWVSDFSHPHYLAGRRAMKTVFGVEPDLTREGGSIPV
TLTFQEATGKNVMLLPVGSADDGAHSQNEKLNRYNYIEGTKMLAAYLYEVSQLKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6385_h11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018235

ORF Size: 1425 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_018235.3

RefSeq Size: 5089 bp

RefSeq ORF: 1428 bp

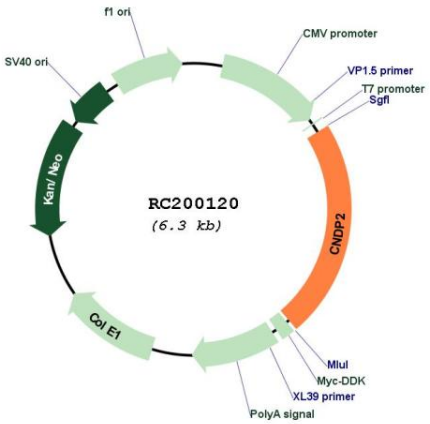
Locus ID: 55748

UniProt ID: Q96KP4

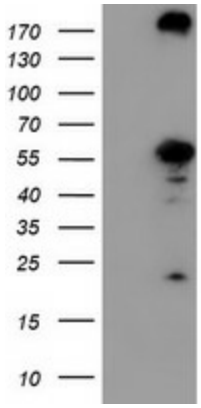
Cytogenetics: 18q22.3

Domains:	Peptidase_M20
Protein Families:	Protease
MW:	52.9 kDa
Gene Summary:	CNDP2, also known as tissue carnosinase and peptidase A (EC 3.4.13.18), is a nonspecific dipeptidase rather than a selective carnosinase (Teufel et al., 2003 [PubMed 12473676]). [supplied by OMIM, Mar 2008]

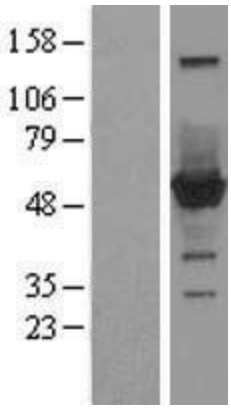
Product images:



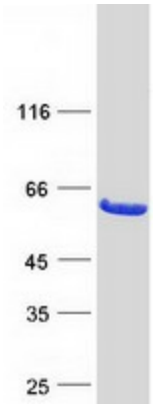
Circular map for RC200120



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CNDP2 (Cat# RC200120, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CNDP2(Cat# [TA503168]). Positive lysates [LY413215] (100ug) and [LC413215] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413215]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200120 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CNDP2 protein (Cat# [TP300120]). The protein was produced from HEK293T cells transfected with CNDP2 cDNA clone (Cat# RC200120) using MegaTran 2.0 (Cat# [TT210002]).