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Product datasheet for RC203144

Corticotropin Releasing Factor (CRH) (NM_000756) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Corticotropin Releasing Factor (CRH) (NM_000756) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Corticotropin Releasing Factor
Synonyms:	CRF; CRH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC203144 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGGCTGCCGCTGCTTGTGTCCGCGGGAGTCCTGCTGGTGGCTCTCCTGCCCTGCCCGCCATGCAGGG
CGCTCCTGAGCCGCGGGCCGGTCCCGGGAGCTCGGCAGGCGCCGCAGCACCCTCAGCCCTTGGATTTCTT
CCAGCCGCCGCCGCAGTCCGAGCAGCCCCAGCAGCCGCAGGCTCGGCCGGTCCTGCTCCGCATGGGAGAG
GAGTACTTCCTCCGCCTGGGGAACCTCAACAAGAGCCCGGCCGCTCCCCTTTCGCCCGCCTCCTCGCTCC
TCGCCGGCGGCAGCGGCAGCCGCCCTTCGCCGGAACAGGCGACCGCCAACTTTTTCCGCGTGTTGCTGCA
GCAGCTGCTGCTGCCTCGGCGCTCGCTCGACAGCCCCGCGGCTCTCGCGGAGCGCGGCGCTAGGAATGCC
CTCGGCGGCCACCAGGAGGCACCGGAGAGAGAAAGGCGGTCCGAGGAGCCTCCCATCTCCCTGGATCTCA
CCTTCCACCTCCTCCGGGAAGTCTTGGAAATGGCCAGGGCCGAGCAGTTAGCACAGCAAGCTCACAGCAA
CAGGAAACTCATGGAGATTATTGGGAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203144 protein sequence
Red=Cloning site Green=Tags(s)

MRLPLLVSAGVLLVALLPCPPCRALLSRGPVPGARQAPQHPQPLDFFQPPPQSEQPQQPQARPVLLRMGE
EYFLRLGNLNKSPAAPLSPASSLLAGGSGSRPSPEQATANFFRVLLQQLLLPRRSLDSPAALAERGARNA
LGGHQEAPERERRSEEPPISLDLTFHLLREVLEMARAEQLAQQAHSNRKLMEIIGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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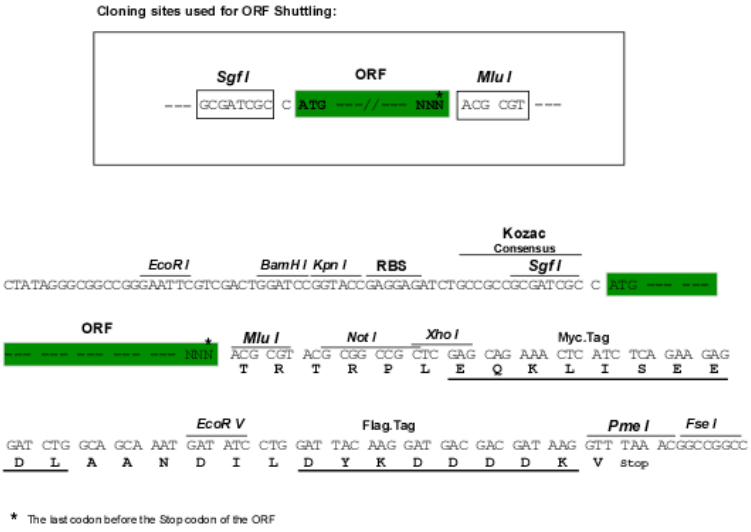
Chromatograms: https://cdn.origene.com/chromatograms/mk6055_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000756

ORF Size: 588 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.

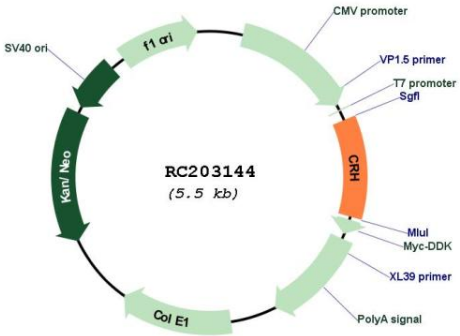
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_000756.4

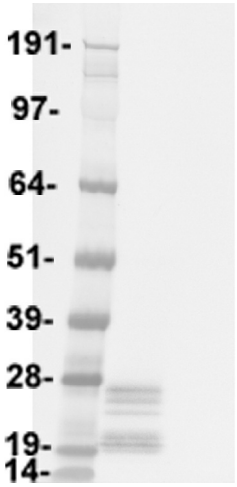
RefSeq Size: 1434 bp

RefSeq ORF:	591 bp
Locus ID:	1392
UniProt ID:	P06850
Cytogenetics:	8q13.1
Domains:	CRF
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Long-term depression
MW:	21.4 kDa
Gene Summary:	This gene encodes a member of the corticotropin-releasing factor family. The encoded preproprotein is proteolytically processed to generate the mature neuropeptide hormone. In response to stress, this hormone is secreted by the paraventricular nucleus (PVN) of the hypothalamus, binds to corticotropin releasing hormone receptors and stimulates the release of adrenocorticotropic hormone from the pituitary gland. Marked reduction in this protein has been observed in association with Alzheimer's disease. Autosomal recessive hypothalamic corticotropin deficiency has multiple and potentially fatal metabolic consequences including hypoglycemia and hepatitis. In addition to production in the hypothalamus, this protein is also synthesized in peripheral tissues, such as T lymphocytes, and is highly expressed in the placenta. In the placenta it is a marker that determines the length of gestation and the timing of parturition and delivery. A rapid increase in circulating levels of the hormone occurs at the onset of parturition, suggesting that, in addition to its metabolic functions, this protein may act as a trigger for parturition. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RC203144



Western blot validation of overexpression lysate (Cat# [LY400256]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203144 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).