

Product datasheet for **RC221771**

CD44 (NM_000610) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD44 (NM_000610) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD44
Synonyms:	CDW44; CSPG8; ECMR-III; HCELL; HUTCH-I; IN; LHR; MC56; MDU2; MDU3; MIC4; Pgp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC221771 representing NM_000610
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGACAAGTTTTGGTGGCAGCAGCCTGGGGACTCTGCCTCGTGCCGCTGAGCCTGGCGCAGATCGATT
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TTGCTTCAATGCTTCAGCTCCACCTGAAGAAGATTGTACATCAGTCACAGACCTGCCAATGCCTTTGAT
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GCCCAGAGGACAGTTCCTGGACTGATTTCTTCAACCCAATCTCACACCCCATGGGACGAGGTCATCAAGC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221771 representing NM_000610
 Red=Cloning site Green=Tags(s)

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MDKFWWHAAWGLCLVPLSLAQIDLNITCRFAGVFHVEKNGRYSISRTEAADLCKAFNSTLPTMAQMEKAL
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GPITITIVNRDGTRYVQKGEYRTNPEDIYPSNPTDDDVSSGSSERSSTSGGYIFYTFSTVHPIPEDDSP
WITDSTDRIPATTLMSTSATATETATKRQETWDFSWLFLPSESKNHLHTTTQMAGTSSNTISAGWEPNE
ENEDERDRHLSFSGSIDDDDEFISSTI STTPRAF DHTKQNDWTQWNP SHSNPEVLLQTTTRMTDVDRN
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QEGGANTTSGPIRTPQIPEWLIILASLLALALILAVCIAVNSRRRCGQKKLVINSGNGAVEDRKP SGLN
GEASKSQEMVHLVNKESSETPDQFMTADETRNLQNVD M KIGV
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6124_a11.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

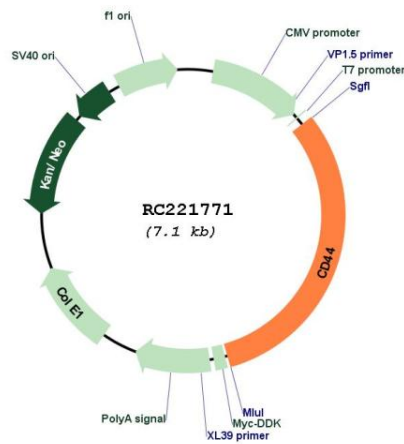
ACCN: NM_000610

ORF Size: 2226 bp

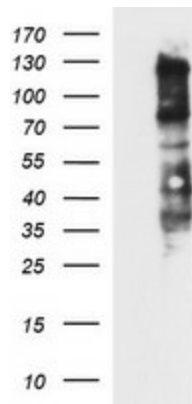
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none">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_000610.4
RefSeq Size:	5748 bp
RefSeq ORF:	2229 bp
Locus ID:	960
UniProt ID:	P16070
Cytogenetics:	11p13
Domains:	Xlink
Protein Families:	Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway, Transmembrane
Protein Pathways:	ECM-receptor interaction, Hematopoietic cell lineage
MW:	81.54 kDa

Gene Summary:

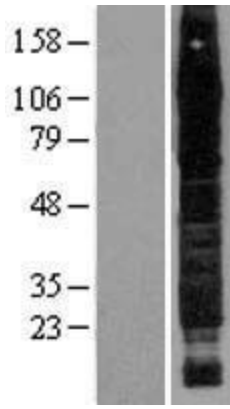
The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). This protein participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, hematopoiesis, and tumor metastasis. Transcripts for this gene undergo complex alternative splicing that results in many functionally distinct isoforms, however, the full length nature of some of these variants has not been determined. Alternative splicing is the basis for the structural and functional diversity of this protein, and may be related to tumor metastasis. [provided by RefSeq, Jul 2008]

Product images:


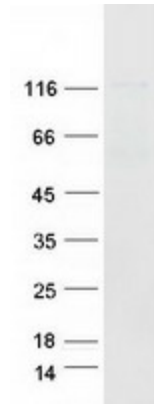
Circular map for RC221771



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CD44 (Cat# RC221771, 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-CD44 (Cat# [TA506726]). Positive lysates [LY400203] (100ug) and [LC400203] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400203]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221771 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CD44 protein (Cat# [TP321771]). The protein was produced from HEK293T cells transfected with CD44 cDNA clone (Cat# RC221771) using MegaTran 2.0 (Cat# [TT210002]).