

Product datasheet for **RG221771**

CD44 (NM_000610) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD44 (NM_000610) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CD44
Synonyms:	CDW44; CSPG8; ECMR-III; HCELL; HUTCH-I; IN; LHR; MC56; MDU2; MDU3; MIC4; Pgp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG221771 representing NM_000610
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACAAGTTTTGGTGGCAGCAGCCTGGGGACTCTGCCTCGTGCCGCTGAGCCTGGCGCAGATCGATT
 TGAATATAACCTGCCGCTTTCAGGTGATTCCACGTGGAGAAAAATGGTCGCTACAGCATCTCTCGGAC
 GGAGGCCGCTGACCTCTGCAAGGCTTCAATAGCACCTTGCCACAATGGCCAGATGGAGAAAGCTCTG
 AGCATCGGATTTGAGACCTGCAGGTATGGGTTCAAGAGGGCACGTGGTGATCCCCGGATCCACCCCA
 ACTCCATCTGTGCAGCAAACAACACAGGGGTGTACATCCTCACATCCAACACCTCCAGTATGACACATA
 TTGCTTCAATGCTTCAGCTCCACCTGAAGAAGATTGTACATCAGTCACAGACCTGCCAATGCCTTTGAT
 GGACCAATTACCATAACTATTGTTAACCGTGATGGCACCCGCTATGTCCAGAAAGGAGAATACAGAACGA
 ATCCTGAAGACATCTACCCAGCAACCCTACTGATGATGACGTGAGCAGCGGCTCCTCCAGTAAAGGAG
 CAGCACTTCAGGAGGTTACATCTTTACACCTTTTCTACTGTACACCCCATCCAGACGAAGACAGTCCC
 TGGATCACCGACAGCACAGACAGAATCCCTGCTACCACCTTGGATGAGCACTAGTGCTACAGCAACTGAGA
 CAGCAACCAAGAGGCAAGAAACCTGGGATTGGTTTTTCATGGTTGTTTCTACCATCAGAGTCAAAGATCA
 TCTTCACACAACAACAATGGCTGGTACGTCTCAAATACCATCTCAGCAGGCTGGGAGCCAAATGAA
 GAAATGAAGTGAAGAGACAGACACCTCAGTTTTTCTGGATCAGGCATTGATGATGATGAAGATTTTA
 TCTCCAGCACCATTTCAACCACACCAGGGCTTTTGACCACACAAAACAGAACAGGACTGGACCCAGTG
 GAACCAAGCCATTCAAATCCGGAAGTGCTACTTCAGACAACCACAAGGATGACTGATGTAGACAGAAAT
 GGCACCCTGCTTATGAAGGAACTGGAACCCAGAAGCACACCCCTCCCTCATTACCATGAGCATCATG
 AGGAAGAAGAGACCCACATTCTACAAGCACAAATCCAGGCAACTCCTAGTAGTACAACGGAAAGAACAGC
 TACCCAGAAGGAACAGTGGTTTGGCAACAGATGGCATGAGGGATATCGCCAAACACCCAAAGAAAGACTCC
 CATTTCACAACAGGGACAGCTGCAGCCTCAGCTCATACCAGCCATCCAATGCAAGGAAGGACAACACCAA
 GCCCAGAGGACAGTTCCTGGACTGATTTCTTCAACCCAATCTCACACCCCATGGGACGAGGTCATCAAGC
 AGGAAGAAGGATGGATATGGACTCCAGTCATAGTATAACGCTTACGCCTACTGCAAATCCAAACACAGGT
 TTGGTGAAGATTTGGACAGGACAGGACCTCTTCAATGACAACGCAGCAGAGTAATTCTCAGAGCTTCT
 CTACATCATGAAGGCTTGAAGAAGATAAAGACCATCCAACAATTCTACTCTGACATCAAGCAATAG
 GAATGATGTCACAGGTGAAGAAGAGACCCAAATCATTCTGAAGGCTCACTACTTTACTGGAAGGTTAT
 ACCTCTCATTACCCACACACGAAGGAAAGCAGGACCTTCAATCCAGTGACCTCAGCTAAGACTGGGTCTT
 TTGGAGTTACTGCAGTACTGTTGGAGATTCCAATCTAATGTCAATCGTTCCTTATCAGGAGACCAAGA
 CACATTCACCCAGTGGGGGTCCCATACCCTCATGGATCTGAATCAGATGGACACTCATGGGAGT
 CAAGAAGTGGAGCAAACAACCTCTGGTCTATAAGGACACCCCAAATCCAGAATGGCTGATCATCT
 TGGCATCCCTCTTGGCTTGGCTTTGATTTCTTGCAGTTTGCATTGCAAGTCAACAGTCAAGAAAGGTGG
 GCAGAAGAAAAGCTAGTGATCAACAGTGGCAATGGAGCTGTGGAGGACAGAAAGCCAAGTGGACTCAAC
 GGAGAGGCCAGCAAGTCTCAGGAAATGGTGCATTTGGTGAACAAGGAGTCGTCAGAACTCCAGACCAGT
 TTATGACAGCTGATGAGACAAGGAACCTGCAGAATGTGGACATGAAGATTGGGGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221771 representing NM_000610
Red=Cloning site Green=Tags(s)

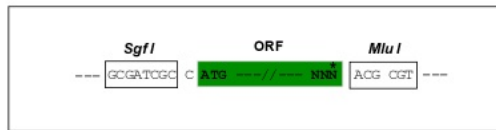
```
MDKFWHAAWGLCLVPLSLAQIDLNITCRFAGVFHVEKNGRYSISRTEAADLCKAFNSTLPTMAQMEKAL
SIGFETCRYGFIIEGHVVIPRIHPNSICAAANTGVYILTSNTSQYDYCFNASAPPEEDCTSVTDLPNAFD
GPITITIVNRDGTTRYVQKGEYRTNPEDIYPSNPTDDVSSGSSSERSSTSGGYIFYTFSTVHPIDEDSP
WITDSTDRIPATTLMSTSATATETATKRQETWDFSWLFLPSESKNHLHTTTQMAGTSSNTISAGWEPNE
ENEDERDRHLSFSGSGIDDEDFISSTI STTPRAF DHTKQNDWTQWNP SHSNPEVLLQTTTRMTDVDRN
GTTAYEGNWNPEAHPPLIHHEHHEEEETPHSTSTIQATPSSTTEETATQKEQWFGNRWHEGYRQTPKEDS
HSTTGTAASAHTSHPMQGRTPSPEDSSWTDFFNPISHPMGRGHQAGRMDMDSHHSITLQPTANPNTG
LVEDLDRTGPLSMTTQQSNSQSFSTSHGLEEDKDHPPTSTLTSSNRNDVTGRRDPNHSEGSTLLEGY
TSHYPHTKESRTFIPVTSAKTGSFGVTA VTVGDSNSNVNRSLSGDQDTFHPSGGSHHTHGHSESDGHS
QEGGANTTSGPIRTPQIPEWLIILASLLALALILAVCIAVNSRRRCGQKKLVINSNGNAVEDRKP SGLN
GEASKSQEMVHLVNKESSETPDQFMTADETRNLQNVDMKIGV
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_000610

ORF Size: 2226 bp

OTI Disclaimer: 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.

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_000610.4](#)

RefSeq Size: 5748 bp

RefSeq ORF: 2229 bp

Locus ID: 960

UniProt ID: [P16070](#)

Cytogenetics: 11p13

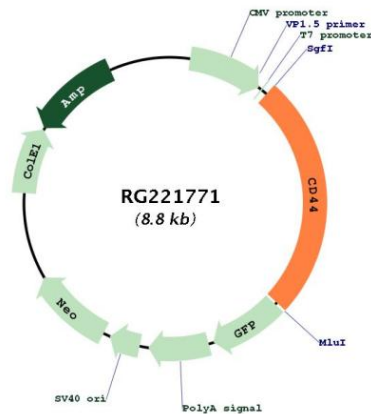
Domains: Xlink

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

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 RG221771