

## Product datasheet for **SC300174**

### CD44 (NM\_001001392) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD44 (NM_001001392) Human Untagged Clone
Tag:	Tag Free
Symbol:	CD44
Synonyms:	CDW44; CSPG8; ECMR-III; HCELL; HUTCH-I; IN; LHR; MC56; MDU2; MDU3; MIC4; Pgp1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC300174 sequence for NM_001001392 edited (data generated by NextGen Sequencing)

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ATGGACAAGTTTTGGTGGCACGCAGCCTGGGGACTCTGCCTCGTGCCGCTGAGCCTGGCGCAGATCGATT  
TGAATATAACCTGCCGCTTTCAGGTGTATTCCACGTGGAGAAAAATGGTCGCTACAGCATCTCTCGGAC  
GGAGGCCGCTGACCTCTGCAAGGCTTTCATAGCACCTTGCCACAATGGCCAGATGGAGAAAGCTCTG  
AGCATCGGATTTGAGACCTGCAGTTTGCATTGCAGTCAACAGTCGAAGAAGGTGTGGGCAGAAGAAAAAG  
CTAGTGATCAACAGTGGCAATGGAGCTGTGGAGGACAGAAAGCCAAGTGGACTCAACGGAGAGGCCAGCA  
AGTCTCAGGAAATGGTGCATTTGGTGAACAAGGAGTCGTCAGAACTCCAGACCAGTTTATGACAGCTGA
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Clone variation with respect to NM\_001001392.1

Restriction Sites:	Please inquire
ACCN:	NM_001001392
Insert Size:	500 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.



<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001001392.1</u> , <u>NP_001001392.1</u>
<b>RefSeq Size:</b>	3985 bp
<b>RefSeq ORF:</b>	420 bp
<b>Locus ID:</b>	960
<b>UniProt ID:</b>	<u>P16070</u>
<b>Cytogenetics:</b>	11p13
<b>Protein Families:</b>	Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway, Transmembrane
<b>Protein Pathways:</b>	ECM-receptor interaction, Hematopoietic cell lineage
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (5) lacks multiple coding-exons compared to variant 1. The translation frame is changed. The resulting isoform (5), also known as CD44 isoform RC, has a distinct and shorter C-terminus, as compared to isoform 1. Sequence Note: This RefSeq record represents the CD44*001.1.1 allele.</p>