

## Product datasheet for **SC320997**

### **NKG2A (KLRC1) (NM\_002259) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NKG2A (KLRC1) (NM_002259) Human Untagged Clone
Tag:	Tag Free
Symbol:	NKG2A
Synonyms:	CD159A; NKG2; NKG2A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_002259.3  
GGCAAGCACAGGAGGATGGGTCCCTTTTCAGGTCTGGAGATGGAATCACTGTTGCTATAG  
CAGGCCTTTTTATGAGACTAACCTGGCCTCTCCACTAAAGGATGTGTGACTTTCTGGGGA  
CAGAAGAGTACAGTCCCTGACATCACACTGCAGAGATGGATAACCAAGGAGTAATCTA  
CTCAGACCTGAATCTGCCCCCAAACCCAAAGAGGCAGCAACGAAAACCTAAAGGCAATAA  
AAGCTCCATTTAGCAACTGAACAGGAAATAACCTATGCGGAATTAACCTTCAAAAAGC  
TTCTCAGGATTTCAAGGGAATGACAAAACCTACTGCAAAGATTTACCATCAGCTCC  
AGAGAAGCTCATTGTTGGGATCCTGGGAATTATCTGTCTTATCTAATGGCCTCTGTGGT  
AACGATAGTTGTTATCCCTCTACATTAATACAGAGGCACAACAATTCTCCCTGAATAC  
AAGAAGCTCAGAAAGCACGTCATTGTGGCCATTGCCTGAGGAGTGGATTACATATCCAA  
CAGTTGTTACTACATTGGTAAGGAAAGAAGAACTTGGGAAGAGAGTTTGCTGGCCTGTAC  
TTCGAAGAAGCTCCAGTCTGCTTTCTATAGATAATGAAGAAGAAATGAAATTTCTGTCCAT  
CATTTCCACCATCCTCATGGATTGGTGTGTTTCGTAACAGCAGTCATCATCCATGGGTGAC  
AATGAATGGTTTGGCTTTCAAACATGAGATAAAAGACTCAGATAATGCTGAACTAACTG  
TGCAGTGTACAAGTAAATCGACTTAAATCAGCCAGTGTGGATCTTCAATAATATATCA  
TTGTAAGCATAAGCTTTAGAGGTAAAGCGTTTGCATTTGCAGTGCATCAGATAAATTGTA  
TATTTCTAAAAATAGAAATATATTATGATTGCATAAATCTTAAAAATGAATTATGTTATTT  
GCTCTAATAAGAAAATTCTAAATCAATTATTGAAACAGGATACACACAATTAAGTA  
CAGACATCCTAGCATTGTGTCGGGCTCATTTTGCTCAACATGGTATTTGTGGTTTTTCAG  
CCTTTCTAAAAGTTGCATGTTATGTGAGTCAGCTTATAGGAAGTACCAAGAAGCAGTCAAA  
CCCATGGAGACAGAAAGTGAATAGTGGTTGCCAATGTCTGAGGGAGGTTGAAATAGGAG  
ATGACCTCTAACTGATAGAACGTTACTTTGTGTCGTGATGAAAACCTTTCTAAATTTAGT  
AGTGGTGTGGTTGTAACCTCTGCGAATATACTAAACATCATTGATTTTTAATCATTTTAA  
GTGCATGAAATGTATGCTTTGTACACGACACTTCAATAAAGCTATCCAGAAAAA  
AAAAAA

**Restriction Sites:** Please inquire



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<b>ACCN:</b>	NM_002259
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	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><a href="#">NM_002259.3</a></u> , <u><a href="#">NP_002250.1</a></u>
<b>RefSeq Size:</b>	1393 bp
<b>RefSeq ORF:</b>	702 bp
<b>Locus ID:</b>	3821
<b>UniProt ID:</b>	<u><a href="#">P26715</a></u>
<b>Cytogenetics:</b>	12p13.2
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Antigen processing and presentation, Graft-versus-host disease, Natural killer cell mediated cytotoxicity

**Gene Summary:**

Natural killer (NK) cells are lymphocytes that can mediate lysis of certain tumor cells and virus-infected cells without previous activation. They can also regulate specific humoral and cell-mediated immunity. The protein encoded by this gene belongs to the killer cell lectin-like receptor family, also called NKG2 family, which is a group of transmembrane proteins preferentially expressed in NK cells. This family of proteins is characterized by the type II membrane orientation and the presence of a C-type lectin domain. This protein forms a complex with another family member, KLRD1/CD94, and has been implicated in the recognition of the MHC class I HLA-E molecules in NK cells. The genes of NKG2 family members form a killer cell lectin-like receptor gene cluster on chromosome 12. Multiple alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jan 2015]

Transcript Variant: This variant (1) encodes the longer isoform (NKG2-A). Variants 1 and 3 encode the same isoform (NKG2-A).