

## Product datasheet for RC216441

### KIDINS220 (NM\_020738) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KIDINS220 (NM_020738) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIDINS220
Synonyms:	ARMS; SINO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216441 representing NM_020738 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

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 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC216441 representing NM\_020738  
 Red=Cloning site Green=Tags(s)

MSVLISQSVINYVEENIPALKALLEKCKDVERNECGQTPLMIAAEQGNLEIVKELIKNGANCNLEDLD  
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 VKGGYTQSVYKEILKRNPVNLTDKDGNTALMIASKEGHTIVQDLLDAGTYVNIIPDRSGDTVLIGAVRGG  
 HVEIVRALLQKYADIDIRGQDNKTALYWAVEKGNATMVRDILQCNPDTEICTKDGETPLIKATKMRNIEV  
 VELLDDKGAQVSAVDKKGDTPLHIAIRGRSRKLAELLLRNPKGDRLLYRPNKAGETPYNIDCSHQKSILT  
 QIFGARHLSPTETDGDMLGYDLYSSALADILSEPTMQPPICVGLYAQWGSKSFLLKLEDEMKTFAQQQ  
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 EELNTLGLDEGAPRHSNLSWQSQTRRTPSLSSLNSQDSSIEISKLTDKVQAEYRDAYREYIAQMSQLEGG  
 PGSTTISGRSSPHSTYYMGQSSSGSIHNSLEQEKGDSEPKPDDGRKSFMLMKGVDVIDYSSSGVSTNDA  
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 KDRKAEGKVERVPKSPESHAEPRTFIKAKEYLSDALLDKDDSSDVGVRSESSPNHSLHNEVADDSQLE  
 KANLIELEDDSHSGKRGIPHLSGLQDPIIARMSICSEDKKSPECSLIASSPEENWPACQKAYNLNRT  
 STVTLNNSAPANRANQNFDEMEGIRETSQVILRPSSPNPTTIQENLKSMTHKRSQRSSYTRLKDP  
 ELHAAASSESTGFGEERESIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

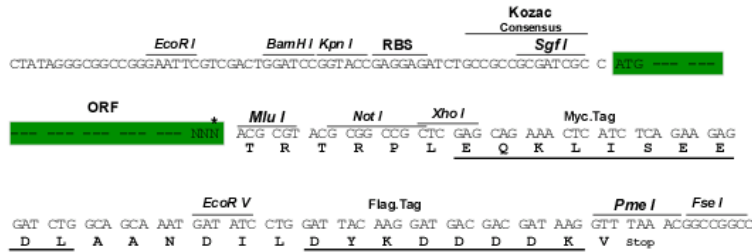
[https://cdn.origene.com/chromatograms/mk8010\\_d05.zip](https://cdn.origene.com/chromatograms/mk8010_d05.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_020738

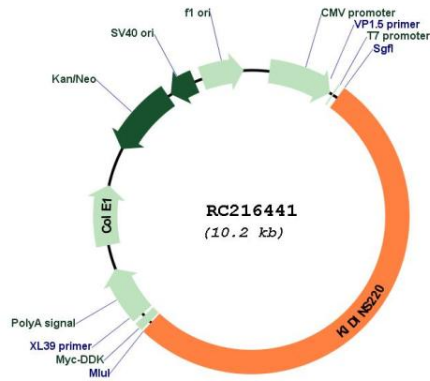
**ORF Size:** 5313 bp

**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.

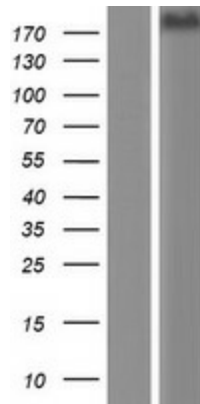
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>	<a href="#">NM_020738.4</a>
<b>RefSeq Size:</b>	7264 bp
<b>RefSeq ORF:</b>	5316 bp
<b>Locus ID:</b>	57498
<b>UniProt ID:</b>	<a href="#">Q9ULH0</a>
<b>Cytogenetics:</b>	2p25.1
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Neurotrophin signaling pathway
<b>MW:</b>	196.4 kDa
<b>Gene Summary:</b>	<p>This gene encodes a transmembrane protein that is preferentially expressed in the nervous system where it controls neuronal cell survival, differentiation into axons and dendrites, and synaptic plasticity. The encoded protein interacts with membrane receptors, cytosolic signaling components, and cytoskeletal proteins, serving as a scaffold that mediates crosstalk between the neurotrophin pathway and several other intracellular signaling pathways. Aberrant expression of this gene is associated with the onset of various neuropsychiatric disorders and neurodegenerative diseases, including Alzheimer's disease. Naturally occurring mutations in this gene are associated with a syndrome characterized by spastic paraplegia, intellectual disability, nystagmus and obesity. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2017]</p>

Product images:



Circular map for RC216441



Western blot validation of overexpression lysate (Cat# [LY412363]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216441 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).