

## Product datasheet for **SC308993**

### KIF1A (NM\_004321) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KIF1A (NM_004321) Human Untagged Clone
Tag:	Tag Free
Symbol:	KIF1A
Synonyms:	ATSV; C2orf20; HSN2C; MRD9; NESCAVS; SPG30; UNC104
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC308993 representing NM_004321. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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<b>Restriction Sites:</b>	Sgfl-RsrII
<b>ACCN:</b>	NM_004321
<b>Insert Size:</b>	5073 bp
<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_004321.6</a></u>
<b>RefSeq Size:</b>	8743 bp
<b>RefSeq ORF:</b>	5073 bp
<b>Locus ID:</b>	547
<b>UniProt ID:</b>	<u><a href="#">Q12756</a></u>
<b>Cytogenetics:</b>	2q37.3
<b>Domains:</b>	FHA, kinesin, PH
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	191.1 kDa

**Gene Summary:**

The protein encoded by this gene is a member of the kinesin family and functions as an anterograde motor protein that transports membranous organelles along axonal microtubules. Mutations at this locus have been associated with spastic paraplegia-30 and hereditary sensory neuropathy IIC. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Apr 2012]

Transcript Variant: This variant (2) lacks two alternate in-frame exons in the coding region compared to variant 1. The encoded isoform (2) is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.