

## Product datasheet for MR206061

### Syne4 (NM\_153577) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Syne4 (NM_153577) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Syne4
Synonyms:	0610012K07Rik; AI428936; KASH4; Nesp4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206061 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCCTGGTTCACCTCTTGGCCGTGAATCCCGCCAGAGCCTGTGAATTGTCCCTGGCAGCTCCTA  
GAGAGCTGGATGTTGTGGAGGGACCATCTGCCCTGCACCTGAGGAAGAGACAAGCAGGCCAGAGCAGGT  
CCAGGCCCTCCTTGGCCCTGCCTGAGCATTGCATGGGTGAAGTGAAGAGCACTGAGTCTGCCACCAGCCCC  
TCAAGACTCCCCCTGGCCTTCTCCATGAGCATCAAGACGGGGCAAGCCCTGTGAGCACTCTGACTCTG  
GTTTGAAGTACTAGAAGCTGAACAGGACAGTCTACATCTTTGTCTGTTGAGGTTGAAGTCCGGCTGCA  
GGACCTGGAACGAGGCCTTGGGTCTTGGACGCTGGCCACAACAGGATTGTCCAGATGCAGGCCCTGCAG  
GCAGAGCTACGAGGGCCGCTGAGCGCGTGGATGCATTGCTTGCATTTGGTGAAGGCCTGGCAGAGAGGA  
GTGAGCCCAGGGCCTGGGCATCCCTGGAGCAGGTCTGAGGGCCCTTGAACCCACCGAGACACCATCTT  
CCAACGGCTCTGGCAGCTGCAGGCCAGTGTGATCAGCTATAGCCTGGTGTCTGAGAAGGCCAACCTCCTG  
GACCAGGACTTGAAGTTGAGGGAGACTCAGACGGGCCAGCAGCTGGTGGAGTCTGGGGCCCTGGGCAC  
CCAGTACCTTCCCACCTCTGCAGAGTTGGAGTGGGACCCAGCAGGGGATGTTGGGGTCTTGGGCCCTC  
AGGGCAAAGATATCTCGGATACCAGGAGCTCCCTGTGAGCTGTGTGGCTACAGGGGACCCAGAGCAGT  
GGACAGGGCCTTGAAGCCTGCTCTCCTTGGGGCTTGGCCACCGAAACATTTAGCGGCTCACCATCGAA  
GGCGGCTCCGGAAGCCTCAGGACAGGAAGAGGCAAGTATCCCCAGTCTGCCTGATGCAATGCTGGAAGT  
GGATCGCGGGGTCCCAGCTCCTGCATCCAAGCGGCCCTGACCCTCTTCTTTCTCCTTCTTCTCCTCT  
CTGGTGGGTGCCACGCTGTTGTGCCCTTGTGGGGTCTCCTGCTGTTCTCATGCCGGCTGGCTAGGA  
CGCCCTACCTGGTCTCAGTTATGTCAATGGTCTCCCTCAATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR206061 protein sequence  
 Red=Cloning site Green=Tags(s)

MALVPPLGREFPPEPVNCPAAPRELDVVGITICPAPEEETS RPEVQVQASLGLPEHCMGELKSTESATSP  
 SRLPLASSHEHQDGGKPCHESDSGLEVLAEQDSLHLCLLRLNFRLQDLERGLGSWTLAHRIVQMALQ  
 AELRGAERVDALLAFGEGLAERSEPRAWASLEQVLRALGTHRDTIFQRLWQLQAQLISYSLVLEKANLL  
 DQDLEVEGSDGPAAGGVWGPWAPSTFPTPALEWDPAGDVGGLGPGSQKISRIPGAPCELCGYRGPQSS  
 GQGLEDLLSLGLGHRKHLAAHRRRLRKPQDRKRVSPSLPDAMLEVDRGVPAPASKRPLTLFLLLLFLL  
 LVGATLLLPLSGVSCCSHARLARTPYLVLSYVNGLPPI

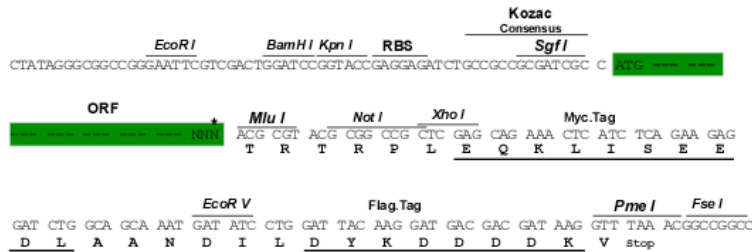
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_153577

**ORF Size:** 1167 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).

**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\\_153577.2](#), [NP\\_705805.1](#)

**RefSeq Size:** 1354 bp

**RefSeq ORF:** 1167 bp

**Locus ID:** 233066

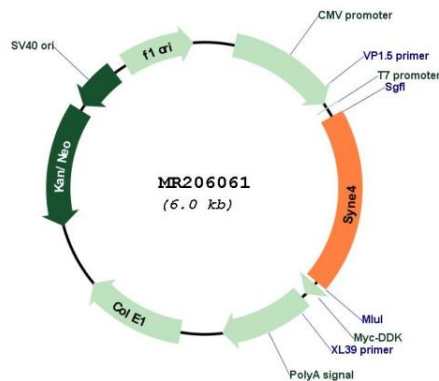
**UniProt ID:** [Q8CII8](#)

**Cytogenetics:** 7 B1

**MW:** 42 kDa

**Gene Summary:** As a component of the LINC (Linker of Nucleoskeleton and Cytoskeleton) complex, involved in the connection between the nuclear lamina and the cytoskeleton. The nucleocytoplasmic interactions established by the LINC complex play an important role in the transmission of mechanical forces across the nuclear envelope and in nuclear movement and positioning (By similarity). Behaves as a kinesin cargo, providing a functional binding site for kinesin-1 at the nuclear envelope. Hence may contribute to the establishment of secretory epithelial morphology, by promoting kinesin-dependent apical migration of the centrosome and Golgi apparatus and basal localization of the nucleus.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR206061