

Product datasheet for **RG206728**

KASH5 (NM_144688) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KASH5 (NM_144688) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KASH5
Synonyms:	CCDC155
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG206728 representing NM_144688
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGGACCTGCCTGAGGGCCCGTGGGTGGCCCCACTGCGGAAATGTACCTCCGGGAGCGCCTGAGGAG
 CAAGGCTGGGAATGCCGGTCAGCTTGGAGGAGCAATACTCAACTCCACGTTGGAAGCTTGTGACCTCA
 GAGGACAGGCACTGTGGCTGTGGCCAGGTGCTGGCCTACCTGGAGGCTGTGACAGGCCAGGGCCCCAG
 GATGCACGCCTCCAAACATTGGCCAACAGCCTGGACCCCAATGGGAGGGCCCTAAGGCCACTGTGGACT
 TGGACACTTTCTGGTTGTCATGCGTGACTGGATTGCTGCCTGTCAACTACATGGGGATTAGAGCTGGA
 AGAGGAGACCGCCTTCCAGGGAGCCTGACCTCCAGCAACTGCCATCTGGATGCCAGAAGCTGAGGAG
 CCAGCCAACCTGGAGAGCTTCGAGGGCGAAGACCCAGACCCGAGCTACAAGCCACAGCTGACCTGCTGA
 GCAGCCTGGAGGACCTGGAGCTCAGCAACCGACGTCTGGTTGGGAGAATGCCAACTGCAGCGGAGCAT
 GGAGACAGCTGAGGAGGGTCAACAGCCTTGGGAGGAGATCTTGGCTCTGCGTAAGCAGCTTCACAGC
 ACCCAGCAGGCCCTGCAGTTTGCCAAGGCCATGGATGAGGAGCTGGAGGACCTGAAGACTCTGGCCAGGA
 GCCTGGAGGAACAGAATCGCAGCCTTCTGGCCCAAGCCCGCAGCGGAAAGGAGCAGCAGCATCTGGT
 GGCTGAGATGGAGACTCTGCAGGAGGAGAACGGGAAGCTGCTTGGCGAGCGGGATGGAGTGAAAAAGAGA
 AGTCAGGAGCTGGCCATGGAGAAGGACACTTTGAAGCGGCAGCTCTTTGAGTGTGAACACCTCATTTGCC
 AAAGAGACACCATCTCTCTGAGCGCACTCGCATGTGGAGAGCCTGGCCAGACCCTGGAAGAATACAG
 AGTGACGACGCAGGAAGTGAAGCTGGAGATTTACGCCTGGAGGAGCAGCTGAGTCAGACCTATGAGGGG
 CCCGATGAGCTACCTGAAGGGGCCAGCTGAGAAGAGTGGCTGGACCGAGCTGTACCCCATCGCTGG
 GCTTGGAGATCGAGGCCATTTCAGACAGAAACAGGAAGTGGCAACTGCTGATCTCTCAACCTCTGTGTGG
 GGTGTGGCAGTGGGAGGAAGTCATCCATGAGACAGTGAAGAACTGAGTTTCCATCTGAAGCCCCAGCT
 GGGGACAGAGAACTTCCAGGGAGAGCCAGCGACCCTGAAGAAGGAAGGAAGGAGCCATCCATGTGGT
 TGACCAGAAGAGAGGAAGAGGAGGATGCAGAGAGCCAGGTACGGCTGATCTCCCTGTCCCTCTAGGAGC
 CCCTCGCCCTGGAGACATCCAGAAAACCTCCAGAGAGACCTGCGCGGCGGGAAGTCCAGCAAGCCCTG
 GTGCTGTGATGAAAAAGCTGGTCCAGTCAGGAGGAGGGCTGGGGCCAGCTCTGCCTGCCCCACAGC
 GGCTCAGAGTCACTCGACATCCACTGATCCAGCTCTGTCTGGGCTGCTGCTGCTGCTGCTGCTCTC
 TGTCTGCTGCTTGGCCGTCACCTCCACCTGGCCCCACCTCCAGCTCTGCTACCTCCAGCCCCCT
 CCAGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG206728 representing NM_144688
 Red=Cloning site Green=Tags(s)

MDLPEGPVGGPTAEMYLRRERPEEARLGMPSLEEQILNSTFEACDPQRTGTVAVAQVLAYLEAVTGQGPQ
 DARLQTLANSLDPNGEGPKATVDLDTFLVVMRDWIAACQLHGGLELEEETAFQGALTSQQLPSGCPAEAE
 PANLESFGGEDPRPELQATADLLSSLEDLELSNRRLVGENAKLQRSMETAEEGSARLGEEILALRKQLHS
 TQQALQFAKAMDEELEDLKTARSLEEQNRSLLAARQAEKEQQHLVAEMETLQEENGKLLAERDGVKKR
 SQELAMEKDTLKRQLFECEHLICQRTILSERTRDVESLAQTLEEYRVTTQELRLEISRLEEQLSQTYES
 PDELPEGAQLRRVGWTELLPPSLGLEIEAIRQKQEVATADLSNPLCGVWQWEEVIHETSEETFPSEAPA
 GGQRNFQGEPAHPPEEGRKEPSMWLTRREEEEDAESQVTADLPVPLGAPRPGDIPENPPERPARRELQAL
 VPVMKKLVPVRRRAWGQLCLPPQRLRVTRHPLIPAPVLGLLLLLLLSVLLLLGPSPPPTWPHLQLCYLQPP
 PV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_144688

ORF Size: 1686 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_144688.3](#), [NP_653289.3](#)

RefSeq Size: 2342 bp

RefSeq ORF: 1689 bp

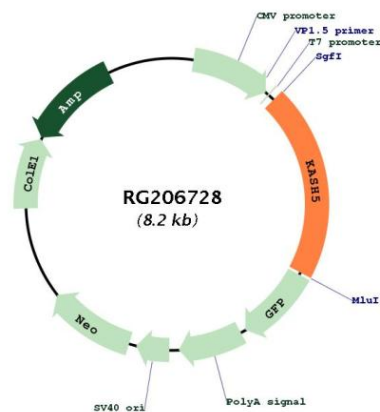
Locus ID: 147872

UniProt ID: [Q8N6L0](#)

Cytogenetics: 19q13.33

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. Required for telomere attachment to nuclear envelope in the prophase of meiosis and for rapid telomere prophase movements implicating a SUN1/2:KASH5 LINC complex in which SUN1 and SUN2 seem to act at least partial redundantly. Required for homologue pairing during meiotic prophase in spermatocytes and probably oocytes. Essential for male and female gametogenesis. Recruits cytoplasmic dynein to telomere attachment sites at the nuclear envelope in spermatocytes. In oocytes is involved in meiotic resumption and spindle formation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG206728