

Product datasheet for MR217121

Ckap5 (NM_001165989) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ckap5 (NM_001165989) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ckap5
Synonyms:	3110043H24Rik; 4930432B04Rik; D730027C18Rik; mKIAA0097; T25636
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR217121 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC

ATGGGAGATGACAGTGAGTGGTTGAAATTACCAGTTGATCAGAAATGTGAACACAAGCTATGGAAAGCAA
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AAAGAATGTTTCAGAAAAAGTAGAACTGGTTCATGGTAAAAAATCTGGACTTGCAACTGAAAAAGGAAT
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CGCAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>MR217121 protein sequence
 Red=Cloning site Green=Tags(s)

MGDDSEWLKLPVDQKCEHKLWKARLSGYEEALKIFQKIKDEKSPEWSKYLGLIKKFVTDSTNAVAVQLKGLE
 AALVYVENAHVAGKTTGEVSVSGVSKVFNQPKAKAKELGIEICL MYVEIEKGESVQEELLKGLDNKNPKI
 IVACIETLRKALSEFGSKIIISLKP I I K V L P K L F E S R D K A V R D E A K L F A I E I Y R W N R D A V K H T L Q N I N S V Q
 L K E L E E E W Y K L P T G A P K P S R F L R S Q Q E L E A K L E Q Q S A G G D A E G G D D G D E V P Q V D A Y E L L D A V E I L S K L
 P K D F Y D K I E A K K W Q E R K E A L E A V E V L V K N P K L E A G D Y A D L V K A L K K V V G K D T N V M L V A A A K C L T G L A V G
 L R K K F G Q Y A G H V V P T I L E K F K E K P Q V V Q A L Q E A I D A I F L T T T L Q N I S E D V L A V M D N K N P T I K Q Q T S L F I
 A R S F R H C T S S T L P K S L L K P F C A A L L K H I N D S A P E V R D A A F E A L G T A L K V V G E K S V N P F L A D V D K L K L D R I
 K E C S E K V E L V H G K K S G L A T E K K E S K P L P G R A A A S G A A G D K D T K D V S G P K P G L K K T P T A K A G G P S K K G K T
 T A P G G S A S A G T K N K G L E T K E I V E P E L S I E V C E E K A S A V L P P T C I Q L L D S S N W K E R L A C M E E F Q K A V E L M
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 E A M T A I A E A C M L P W T A E Q V M S M A F S Q K N P K N Q S E T L N W L S N A I K E F G F S E L N V K A F I S N V K T A L A A T N P A
 V R T S A I T L L G V M Y L Y V G P S L R M I F E D E K P A L L S Q I D A E F Q K M Q G Q S P P A P T R G I A K H S T S A T D E G E D G E E
 P E G G N D V V D L L P R I E I S D K I T S E L V S K I G D K N W K I R K E G L D E V A G I I N E A K F I Q P N I G E L P T A L K G R L N
 D S N K I L V Q Q T L N I L Q Q L A V A M G A N I R Q H V K N L G I P V I T V L G D S K N N V R A A A L A T V N A W A E Q T G M K E W L E G
 E D L S E E L K K E N P F L R Q E L L G W L A E K L P T L R S T P T D L I L C V P H L Y S C L E D R N G D V R K K A Q D A L P F F M M H L G
 Y E K M A K A T G K L K P T S K D Q V L A M L E K A K A N M P S K P A A P A K A M S K P M G G S A P A K T Q P I P A P V E D S V S S T I E A
 K P D L K K A K A P G V S S K A K S V Q G K K V P S K T T L K E D D D K S G P I F I V V P N G K E Q R M R D E K G L K V L K W N F T T P R D
 E Y I E Q L K T Q M S T C V A K W L Q D E M F H S D F Q H H N K A L A V M V D H L E S E K D G V I S C L D L I L K W L T L R F F D T N T S V
 L M K A L E Y L K L L F T L L S E E E Y H L T E N E A S S F I P Y L I L K V G E P K D V I R K D V R A I L N R M C L V P A S K M F P F I M
 E G T K S K N S K Q R A E C L E E L G C L I E S Y G M N V C Q P T P G K A L K E I A I H I G D R D N A V R N A A L N T I V T V Y N V H G D Q
 V F K L I G N L S E K D M S M L E E R I K R S A K R P S A A P V K Q A E E K P Q R T Q N I N S N A N M L R K G P A E D M S S K L N Q A R S L
 S G H P E A A Q M V R R E F Q L D L D E I E N D N G T V R C E M P E L V Q H K L D D I F E P V L I P E P K I R A V S P H F D M H S N T A S
 T I N F I I S Q V A S G D I N T S I Q A L T Q I D E V L R Q E D K A E A M S G H I D Q F L I A T F M Q L R L I Y S T H M A D E K L D K D E I
 I K L Y S C I I G N M I S L F Q I E S L A R E A S T G V L K D L M H G L I T L M L D S R I E D L E E G Q Q V I R S V N L L V V K V L E K S D
 Q T N I L S A L L V L L Q D S L L A T A S S P K F S E L V M K C L W R M V R L L P D T I N S I N L D R I L L D I H I F M K V F P K E K L K Q
 C K S E F P I R T L K T L L H T L C K L G P K I L D H L T M I D N K N E S E L E A H L C R M M K H S M D Q T G S K S D K E T E K G A S R I
 D E K S S K A K V N D F L A E I F K K I G S K E N T K E G L A E L Y E Y K K Y S D T D I E P F L K N S S Q F F Q S Y V E R G L R V I E M E
 R E S K G R I P T S T G I S P Q M E V T C V P T P T S T V S S L G N T N G E E V G P S V Y L E R L K I L R Q R C G L D N T K Q D D R P P L T
 S L L S K P A I P P V A S S T D M L H S K L S Q L R E S R E Q H Q H S D L S N Q T H S A G T M T S S S T T N I D D L K K R L E R I K S S
 R K

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001165989

ORF Size: 6096 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_001165989.2](#)

RefSeq Size: 6666 bp

RefSeq ORF: 6099 bp

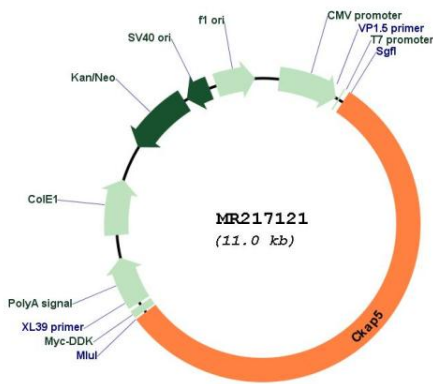
Locus ID: 75786

Cytogenetics: 2 E1

MW: 225.6 kDa

Gene Summary: Binds to the plus end of microtubules and regulates microtubule dynamics and microtubule organization. Acts as processive microtubule polymerase. Promotes cytoplasmic microtubule nucleation and elongation. Plays a major role in organizing spindle poles. In spindle formation protects kinetochore microtubules from depolymerization by KIF2C and has an essential role in centrosomal microtubule assembly independently of KIF2C activity. Contributes to centrosome integrity. Acts as component of the TACC3/ch-TOG/clathrin complex proposed to contribute to stabilization of kinetochore fibers of the mitotic spindle by acting as inter-microtubule bridge. The TACC3/ch-TOG/clathrin complex is required for the maintenance of kinetochore fiber tension. Enhances the strength of NDC80 complex-mediated kinetochore-tip microtubule attachments.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217121