

Product datasheet for MR201779

Kras (NM_021284) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kras (NM_021284) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Kras
Synonyms: A1929937; c-K-ras; c-Ki-ras; K-Ras; K-ras; Ki-ras; Kras-2; Kras2; p21B; ras
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201779 representing NM_021284
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGACTGAGTATAAACTTGTGGTGGTTGGAGCTGGTGGCGTAGGCAAGAGCGCCTTGACGATACAGCTAA
 TTCAGAATCACTTTGTGGATGAGTACGACCCTACGATAGAGGACTCTACAGGAAACAAGTAGTAATTGA
 TGGAGAAACCTGTCTCTGGATATTCTCGACACAGCAGGTCAGAGGAGTACAGTGAATGAGGGACCAG
 TACATGAGAACTGGGGAGGGCTTTCTTTGTGATTTGCCATAAATAACTAAATCATTTGAAGATTC
 ACCATTATAGAGAACAAATTAAGAGTAAAGGACTCTGAAGATGTGCCTATGGTCTGGTAGGGAATAA
 GTGTGATTTGCCTTCTAGAACAGTAGACACGAAACAGGCTCAGGAGTTAGCAAGGAGTTACGGGATCCG
 TTCATTGAGACCTCAGCAAAGACAAGACAGGGTGTGACGATGCCTTCTATACATTAGTCCGAGAAATTC
 GAAACATAAAGAAAAGATGAGCAAAGATGGGAAGAAGAAGAAGAAGTCAAGGACAAGGTGTACAGT
 TATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201779 representing NM_021284
 Red=Cloning site Green=Tags(s)

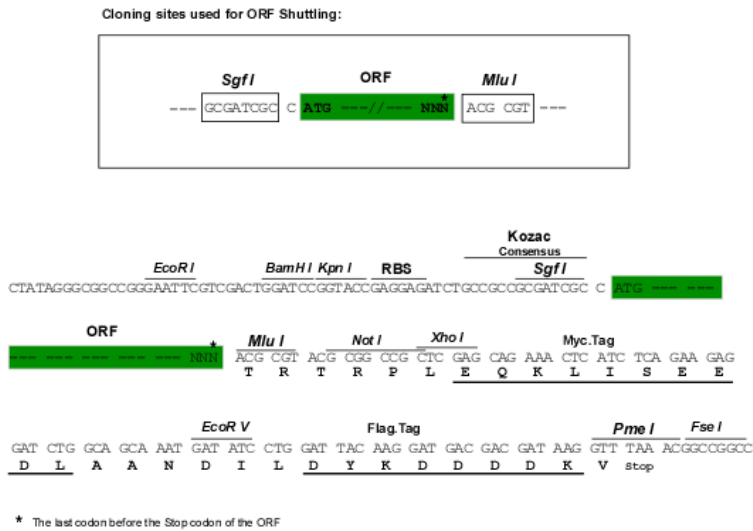
MTEYKLVVVGAGGVGKSALTIQLIQNHFVDEYDPTIEDSYRKQVVIDGETCLLDILDITAGQEEYSAMRDQ
 YMRGTGEGFLCVFAINNTKSFEDIHYYREIQIKRVKDSQVPMVLVGNKCDLPSRTVDTKQAQELARSYGIP
 FIETSAKTRQGVDDAFYTLVREIRKHKEMSKDGKSKKSKSRTRCTVM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021284

ORF Size: 564 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_021284.2](#)

RefSeq Size: 4663 bp

RefSeq ORF: 567 bp

Locus ID: 16653

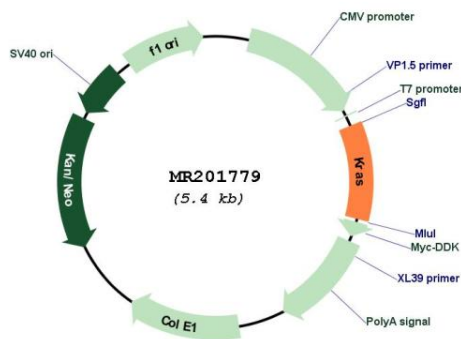
UniProt ID: [P32883](#)

Cytogenetics: 6 77.37 cM

MW: 21.9 kDa

Gene Summary: Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (By similarity). Plays an important role in the regulation of cell proliferation (PubMed:6474169, PubMed:1352876). Plays a role in promoting oncogenic events by inducing transcriptional silencing of tumor suppressor genes (TSGs) in colorectal cancer (CRC) cells in a ZNF304-dependent manner (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201779