

Product datasheet for **RG220448**

INCENP (NM_020238) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	INCENP (NM_020238) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	INCENP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220448 ORF sequence, codon optimized. Due to the complexity of NM_020238, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGCACCACCGCCCCGGCCCCATACATCTGTTGGAGCTTTGTGACCAGAAGCTGATGGAATTTCTTT
GTAACATGGACAACAAGGATCTCGTGTGGCTGGAGGAAATCCAAGAAGAGGCTGAACGGATGTTTACACG
CGAATTCAGTAAAGAGCCAGAAGTATGATGCCAAAAACACCTCCCAGAAGAACCGGCGCAAGAAAAGAAGG
ATTTATACGTTTCAGGATGAGAACCGGACCCGATTGGAAGACGGCTCTCAAGACGAAAATCCCGGTCAA
GCCAGCTGAGTTCTAGGCGCTGCGATCCAAAGATTCCGTGGAGAAGTTGGCTACAGTGGTGGGCGAGAA
TGGATCCGTGCTCCGCCGAGTTACAAGGGCCGCTGCCGCTGCGGCAGCAGCCACGATGGCCCTGGCAGCC
CCGAGCTCCCCAACTCCTGAGAGCCCTACAATGCTTACCAAGAAGCCCGAGGATAATCACACCCAGTGTC
AGCTGGTACCCGTGGTGGAAATCGGAATCAGCGAACGCCAAAACGAGAACAGCAGCTACCCAGCTCAT
GTCCACCGAGCCGCTCCCCGGACTTTGAGTCCTACCCAGCTAGTGCCACAGCCCTACAAGCCAGGGA
ATACCTACAAGCGATGAAGAATCCACGCCGAAAAAGAGTAAAGCTCGCATCCTGGAGTCCATCACCGTGT
CTTCACTGATGGCGACACCCAGGACCCAAAGGGTCAAGGCGTCGGTACGGGAAGGTCTGCCTCTAAACT
GCGGATCGCGCAGGTGTCCCCGGGCCTCGGGATTACCCAGCTTTTCTGACAGCCCTGGCGCAGCGC
GTGCTGGCTCCTATCCTGCCGACAATTTTCAACACCAACGGGCTCTAGAACAGATTCCAGAGCGTCA
GACACAGCCGATAGCCCTTCTCCCTAGCCCCCAAGTGTGGCTCAGAAGTATTCTCTGTGGCCAA
ACAAGAGAGTGTGGTTCGAAGAGCCAGCCGACGCTCGCTAAGAAGACAGCAGAGGAGCCTGCAGCCAGC
GGTCGGATAATATGCTACTCTTACCTCGAAAGACTGCTCAATGTGGAAGTGGCCAGAAAGTCGGGTCCG
AGCAGAAAGGAACCTCCTGAAGAGGCTGAGCCCGTCGCGCGGCTGAACCCGAAGTTCAGAAAAATATGG
CAACAACTCTTGCCACACAACGACACAGAAATTGCCAATTCTACACCAATCTAAACCGGCTGCCTCT



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ACCGCTGAGACGCCATCCGCTGGGCAGCAGGAGGCCAAGACGGATCAGGCCGACGGTCTCTCGCAACCC
 CTAGTCAGCCCGCAGGAAACGCAGCTACAAACAGGCAGTGTCCGAGCTGGATGAAGAACAGCATCTCGA
 GGATGAGGAGCTCCAGCCTCCAAGGAGCAAAACCCCTAGCTCCCCCTGTCCGCTTCCAAGTTGTGCG
 CCTCTGCGACTTTTCTTACACCGTGCAGCGGAACAGATGCTCATGACCCCAACGAGTGCGCCCCGAT
 CAGTGATGAAATCCTTTATTAGAGGAATACCCCTCTCCGAATGGATCCCAAGGAGAAGGAGCGACAGCG
 ATTGGAACCTCCGACGAAAAGAAGAGGCGGAGCAGCTGCGCAGGCAGAAAGTGGAGGAGGATAAGAGA
 AGACGCTGGAAGAAGTGAAATTGAAACGAGAGGAAAGGCTGAGAAAGTGTCTCCAGGCCCGAAGACGAG
 TCGAGCAGATGAAAGAGGAAAAAGAAAAACAGATCGAACAGAAGTTTGCACAGATTGACGAGAAAACTGA
 AAAAGCCAAAGAGGAAAGACTGGCAGAGGAGAAGGCAAGGAAGAAGGCAGCCGCTAAGAAAAATGGAAGAG
 TCGAGGCTCGCGCAAAACAGGAGGAAGTGCACGGCGCTTCGCTGGCTTCAACAGGAGGAGGAGAGAGA
 GGAGGCATCAGGAATCCTGCAGAAAAAAAAGAAAGAGGAGCAGGAGAGACTGAGAAAGGCCCGCGAAGC
 CAAGCGCTCGCCGAGCAGCGGAGCAAGAGCGCAGGGAGCAAGAAAGCGGGAACAGGAACGCCGCGAG
 CAGGAACGCAGAGAACAAGAGAGGCGAGAACAGGAGAGAAGAGAACAGGAGAGGCAACTGGCCGAGCAGG
 AGAGAAGGAGAGAGCAAGAGCGACTCCAAGCCGAAAGGGAACTGCAGGAGAGGGAGAAAGCACTGAGGCT
 CCAAAAGGAACAGCTGCAGCGGAACTGGAAGAAAAAGAAAAAAAAGAGGAACAACAGCGACTTGTCTGAG
 CGACAACTGCAGGAAGAGCAGGAGAAGAGGCCAAAGAAGCCGCGGAGCGTCTAAAGCCTTGAACGTGA
 CCGTCGACGTTCACTCTCCGCTGCACATCCTACCTATAACCCCCAGGGACACAAAGCACCCCTCA
 GATTAACCCACATAACTACGGAATGGACCTCAATTCTGACGACAGTACTGATGACGAGGCCACCCCGCA
 AAGCCTATACCCACCTGGGCGCGCGGAACCTCTCTCAGCCAGGCGATCATCCACCAATATTACCAACCTC
 CAAACCTGCTGGAACCTTTGGCACCATTTTGCCCTGGATCTGGAGGACATCTTTAAGAAAAGCAAGCC
 GAGATATCATAAAGGACTAGCTCTGCCGTCTGGAATCCCCACCACTGCAGGGCGCTCGCGTGCCAGT
 TCCTTGGCATATTCACTCAAAAACAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG220448 representing NM_020238

Red=Cloning site Green=Tags(s)

MGTTAPGPIHLLLEL CDQKLEMEFLCNMDN KDLVWLEEIQEEAERMFTRFSKEPELMPKTPSQKNRRKKRR
ISYVQDENRDPIRRRLSRRKSRSSQLSSRRLRSKDSVEKLATVVGENGSVLRRVTRAAAAAAATMALAA
PSSPTPESPTMLTKKPEDNHTQCQLVPVVEIGISERQNAEQHVTQLMSTEPLPRTLSPTPASATAPTSQ
IPTSD EESTPKKSKARILE SITVSSLMATPQDPKGQGVGTGRSASKLRIAQVSPGPRDSPAFPDPSPWRER
VLAPILPDNFSTPTGSR TDSQSVRHSP IAPSSSPQVLAQKYSLVAKQESVVRASRLAKKTAEEPAAS
GRIICHSYLERLLNVEVPQKVGSEQKEPPEEAEPVAAAEEPEVPENN GNNSWPHNDTEIANSTPNPKPAAS
SPETPSAGQQEAKTDQADGPREPPQSARRKRSYKQAVSELDEEQHLEDEELQPPRSKTPSSPCPASKVVR
PLRTFLHTVQRNQMLMPT SAPRSVMKSF IKRNTPLRMDPKEKERQRL ENLRRKEEAEQLRRQKVEEDKR
RRL EEVKL KREERLRKVLQARERVEQMKEEKKKQIEQKFAQIDEKTEKAKEERLAE EKAKKKAAAKMEE
VEARRKQ EEDARRLRWLQEEEEERRHQELLQKKKKEEQERLRKAAEAKRLAEQREQERREQERREQERRE
QERREQERREQERREQERQLAEQERRRERQERLQ AERELQEREKALRLQKEQLQRELEEKKKKKEEQRLAE
RQLQEEQEKKAKEAAGASKALNVTVDVQSPACTSSPITPQGHKAPPQINPHNYGMDLNSDDST DDEAHPR
KPIPTWARGTPLSQAIHQYYQPPNLELFGTILPLDLEDIFKFSKPRYHKRTSSAVWNSPPLQGARVPS
SLAYSLKKH

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_020238

ORF Size: 2757 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:

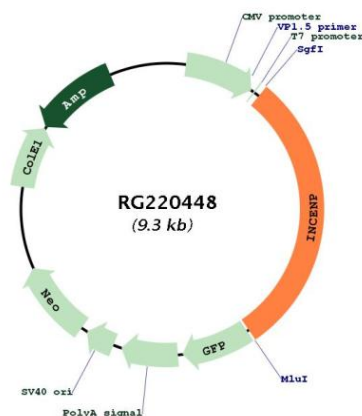
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_020238.1](#), [NP_064623.1](#)

RefSeq Size: 4134 bp
 RefSeq ORF: 2745 bp
 Locus ID: 3619
 UniProt ID: [Q9NQS7](#)
 Cytogenetics: 11q12.3
 Protein Families: Druggable Genome
 Gene Summary:

In mammalian cells, 2 broad groups of centromere-interacting proteins have been described: constitutively binding centromere proteins and 'passenger,' or transiently interacting, proteins (reviewed by Choo, 1997). The constitutive proteins include CENPA (centromere protein A; MIM 117139), CENPB (MIM 117140), CENPC1 (MIM 117141), and CENPD (MIM 117142). The term 'passenger proteins' encompasses a broad collection of proteins that localize to the centromere during specific stages of the cell cycle (Earnshaw and Mackay, 1994 [PubMed 8088460]). These include CENPE (MIM 117143); MCAK (MIM 604538); KID (MIM 603213); cytoplasmic dynein (e.g., MIM 600112); CliPs (e.g., MIM 179838); and CENPF/mitosin (MIM 600236). The inner centromere proteins (INCENPs) (Earnshaw and Cooke, 1991 [PubMed 1860899]), the initial members of the passenger protein group, display a broad localization along chromosomes in the early stages of mitosis but gradually become concentrated at centromeres as the cell cycle progresses into mid-metaphase. During telophase, the proteins are located within the midbody in the intercellular bridge, where they are discarded after cytokinesis (Cutts et al., 1999 [PubMed 10369859]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG220448