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Product datasheet for SC338147

CENPE (NM_001286734) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CENPE (NM_001286734) Human Untagged Clone
Tag:	Tag Free
Symbol:	CENPE
Synonyms:	CENP-E; KIF10; MCPH13; PPP1R61
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001286734, the custom clone sequence may differ by one or more nucleotides

ATGGCGGAGGAAGGAGCCGTGGCCGTCTGCGTGCGAGTGCGGCCGCTGAACAGCAGAGAAGAATCACTTG
GAGAAACTGCCCAAGTTTACTGGAAAACTGACAATAATGTCATTTATCAAGTTGATGGAAGTAAATCCTT
CAATTTTGATCGTGTCTTTCATGGTAATGAAACTACCAAAAATGTGTATGAAGAAATAGCAGCACCAATC
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CGCCTCCTCAGGCAAGGATGTGCCTGAGTGCAAAACTCAGTAG

Restriction Sites: SgfI-MluI

ACCN: NM_001286734

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001286734.1, NP_001273663.1

RefSeq Size: 8267 bp

RefSeq ORF: 7743 bp

Locus ID: 1062

UniProt ID: Q02224

Cytogenetics: 4q24

Protein Families: Druggable Genome, Stem cell - Pluripotency

Gene Summary: Centrosome-associated protein E (CENPE) is a kinesin-like motor protein that accumulates in the G2 phase of the cell cycle. Unlike other centrosome-associated proteins, it is not present during interphase and first appears at the centromere region of chromosomes during prometaphase. This protein is required for stable spindle microtubule capture at kinetochores which is a necessary step in chromosome alignment during prometaphase. This protein also couples chromosome position to microtubule depolymerizing activity. Alternative splicing results in multiple transcript variants encoding distinct protein isoforms. [provided by RefSeq, Nov 2014]
Transcript Variant: This variant (2) lacks two alternate exons and uses an alternate in-frame splice junction at the 5' end of an exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1. It is unknown whether this isoform (2) is proteolytically processed in the same manner as isoform 1.