

Product datasheet for MC209476

Cenpx (NM_016665) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cenpx (NM_016665) Mouse Untagged Clone

Tag:Tag FreeSymbol:CenpxSynonyms:Stra13

Mammalian Cell Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC209476 representing NM_016665

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGAGGGAAACAGTGGCTTCCGGAAGGAACTGGTGAGCAGACTACTCCATTTGCACTTCAGGGATTGCAAGACCAAAGTCAGCGGGGATGCACTGCAGCTCATGGCGGAGTTCCTGAGGATCTTCGTACTAGAGGCTGCTGTCCGTGGGGGTCTGGCAGGCCCAGGCAGAAGACCTGGATGTTGTGGAAGTGGATCAGCTGGAGAAAGTG

CTCCCTCAGCTGCTCCTGGACTTCTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja3266-e05.zip

Restriction Sites: Sgfl-Mlul ACCN: NM_016665

Insert Size: 237 bp

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).



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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: <u>NM 016665.2, NP 057874.2</u>

RefSeq Size: 655 bp
RefSeq ORF: 237 bp
Locus ID: 20892
UniProt ID: Q8C4X1
Cytogenetics: 11 E2

Gene Summary: DNA-binding component of the Fanconi anemia (FA) core complex. Required for the normal

activation of the FA pathway, leading to monoubiquitination of the FANCI-FANCD2 complex in response to DNA damage, cellular resistance to DNA cross-linking drugs, and prevention of chromosomal breakage. In complex with CENPS (MHF heterodimer), crucial cofactor for FANCM in both binding and ATP-dependent remodeling of DNA. Stabilizes FANCM. In complex with CENPS and FANCM (but not other FANC proteins), rapidly recruited to blocked forks and promotes gene conversion at blocked replication forks. In complex with CENPS, CENPT and CENPW (CENP-T-W-S-X heterotetramer), involved in the formation of a functional kinetochore outer plate, which is essential for kinetochore-microtubule attachment and faithful mitotic progression. As a component of MHF and CENP-T-W-S-X complexes, binds DNA and bends it to form a nucleosome-like structure. DNA-binding function is fulfilled in the

presence of CENPS, with the following preference for DNA substates: Holliday junction > double-stranded > splay arm > single-stranded. Does not bind DNA on its own.

[UniProtKB/Swiss-Prot Function]