

## **Product datasheet for TP303240L**

## OriGene Technologies, Inc.

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## MHF2 (CENPX) (NM\_144998) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human stimulated by retinoic acid 13 homolog (mouse) (STRA13), 1

mg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC203240 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MEGAGAGSGFRKELVSRLLHLHFKDDKTKEAAVRGVRQAQAEDALRADVDQLEKVLPQLLLDF

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

**Predicted MW:** 6.8 kDa

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

 RefSeq:
 NP 659435

 Locus ID:
 201254

 UniProt ID:
 A8MT69

RefSeq Size: 875

Cytogenetics: 17q25.3





RefSeq ORF: 189

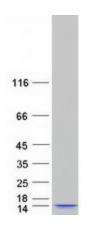
Synonyms: CENP-X; D9; FAAP10; MHF2; STRA13

Function]

**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 (PubMed:20347428, PubMed:20347429). 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 (PubMed:20347428, PubMed:20347429). 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 (PubMed:19620631). As a component of MHF and CENP-T-W-S-X complexes, binds DNA and bends it to form a nucleosome-like structure (PubMed:20347428, PubMed:20347429). 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 (PubMed:20347429). [UniProtKB/Swiss-Prot

## Product images:



Coomassie blue staining of purified CENPX protein (Cat# [TP303240]). The protein was produced from HEK293T cells transfected with CENPX cDNA clone (Cat# [RC203240]) using MegaTran 2.0 (Cat# [TT210002]).