

## Product datasheet for PH303240

### MHF2 (CENPX) (NM\_144998) Human Mass Spec Standard

#### Product data:

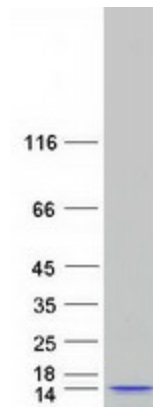
Product Type:	Mass Spec Standards
Description:	STRA13 MS Standard C13 and N15-labeled recombinant protein (NP_659435)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC203240
Predicted MW:	7 kDa
Protein Sequence:	>RC203240 protein sequence Red=Cloning site Green=Tags(s)  MEGAGAGSGFRKELVSRLHLHFKDDKTKEAAVRGVRQAQEDALRADVDQLEKVL PQLLLDF  TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_659435</a>
RefSeq Size:	875
RefSeq ORF:	189
Synonyms:	CENP-X; D9; FAAP10; MHF2; STRA13
Locus ID:	201254
UniProt ID:	<a href="#">A8MT69</a>
Cytogenetics:	17q25.3



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**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 Function]

**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]).