

MHF2/CENPX Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57314

Specification

MHF2/CENPX Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity
Bovine
Host
Clonality
Calculated MW
R8MT69
Bovine
Rabbit
Polyclonal
8959

MHF2/CENPX Polyclonal Antibody - Additional Information

Gene ID 201254

Other Names

Centromere protein X, CENP-X, FANCM-associated histone fold protein 2, FANCM-interacting histone fold protein 2, Fanconi anemia-associated polypeptide of 10 kDa, Retinoic acid-inducible gene D9 protein homolog, Stimulated by retinoic acid gene 13 protein homolog, CENPX

Dilution

IHC-P~~N/A<br \><span class
="dilution_IHC-F">IHC-F~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

MHF2/CENPX Polyclonal Antibody - Protein Information

Name CENPX

Function

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).

Cellular Location

Nucleus. Chromosome, centromere. Chromosome, centromere, kinetochore. Note=Assembly of CENPS and CENPX and its partner subunits CENPT and CENPW at centromeres occurs through a dynamic exchange mechanism. Although exchange is continuous in the cell cycle, de novo assembly starts principally during mid-late S phase and is complete by G2. CENPX being less stably bound at the kinetochore than CENPS.

MHF2/CENPX Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

MHF2/CENPX Polyclonal Antibody - Images