

Anti-FAM111A Antibody

Catalog # AP54108

Specification

Anti-FAM111A Antibody - Product Information

Application WB
Primary Accession
Reactivity
Host
Clonality
Calculated MW
WB
Q96PZ2
Human, Mouse
Rabbit
Polyclonal
70196

Anti-FAM111A Antibody - Additional Information

Gene ID 63901

Other Names

Serine protease FAM111A; KIAA1895

Target/Specificity

Recognizes endogenous levels of FAM111A protein.

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-FAM111A Antibody - Protein Information

Name FAM111A {ECO:0000303|PubMed:23093934, ECO:0000312|HGNC:HGNC:24725}

Function

Single-stranded DNA-binding serine protease that mediates the proteolytic cleavage of covalent DNA-protein cross-links (DPCs) during DNA synthesis, thereby playing a key role in maintaining genomic integrity (PubMed:32165630). DPCs are highly toxic DNA lesions that interfere with essential chromatin transactions, such as replication and transcription, and which are induced by reactive agents, such as UV light or formaldehyde (PubMed:32165630). Protects

replication fork from stalling by removing DPCs, such as covalently trapped topoisomerase 1 (TOP1) adducts on DNA lesion, or poly(ADP-ribose) polymerase 1 (PARP1)- DNA complexes trapped by PARP inhibitors (PubMed:32165630). Required for PCNA loading on replication sites (PubMed:24561620). Promotes S-phase entry and DNA synthesis (PubMed:24561620). Acts also as a restriction factor for some viruses including SV40



Tel: 858.875.1900 Fax: 858.875.1999

polyomavirus and vaccinia virus (PubMed:23093934, PubMed:37607234). Mechanistically, affects nuclear barrier function during viral replication by mediating the disruption of the nuclear pore complex (NPC) via its protease activity (PubMed:33369867, PubMed:37607234). In turn, interacts with vaccinia virus DNA-binding protein OPG079 in the cytoplasm and promotes its degradation without the need of its protease activity but through autophagy (PubMed: 37607234).

Cellular Location

Nucleus. Chromosome. Cytoplasm. Note=Mainly localizes to nucleus: colocalizes with PCNA on replication sites

Anti-FAM111A Antibody - Protocols

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

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

Anti-FAM111A Antibody - Images

Anti-FAM111A Antibody - Background

Rabbit polyclonal antibody to FAM111A