

Anti-FAM111A Antibody

Catalog # AP54108

Specification

Anti-FAM111A Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB <u>Q96PZ2</u> 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.

Dilution WB~~1:1000

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:<a



href="http://www.uniprot.org/citations/24561620" target="_blank">24561620). Promotes Sphase entry and DNA synthesis (PubMed:24561620). Also acts as a restriction factor for some viruses including SV40 polyomavirus and vaccinia virus (PubMed:23093934, PubMed:23093934). 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.

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

Anti-FAM111A Antibody - Images

Anti-FAM111A Antibody - Background

Rabbit polyclonal antibody to FAM111A