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# Anti-FAM111A Antibody

Catalog # AP54108

## Product Information

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

## Additional Information

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|---|---|
| **Gene ID** | 63901 |
| **Other Names** | Serine protease FAM111A; KIAA1895 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human FAM111A. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000) |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

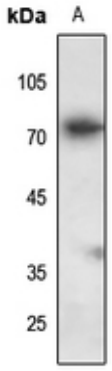
| | |
|---|---|
| **Name** | FAM111A {ECO:0000303\|PubMed:23093934, ECO:0000312\|HGNC:HGNC:24725} |
| **Function** | Single-stranded DNA-binding serine protease that mediates the proteolytic cleavage of covalent DNA-protein cross-links (DPCs) during DNA synthesis, thereby playing a key role in maintaining 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). Also acts as a restriction factor for some viruses including SV40 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

## Images




Western blot analysis of FAM111A expression in Jurkat (A) whole cell lysates. (Predicted band size: 70 kD; Observed band size: 70 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.