

EME2 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16348b

Specification

EME2 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	A4GXA9
Other Accession	NP_001010865.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	41178
Antigen Region	249-278

EME2 Antibody (C-term) - Additional Information

Gene ID 197342

Other Names

Probable crossover junction endonuclease EME2, 3122-, EME2

Target/Specificity

This EME2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 249-278 amino acids from the C-terminal region of human EME2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EME2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EME2 Antibody (C-term) - Protein Information

Name EME2 {ECO:0000303|PubMed:35290797, ECO:0000312|HGNC:HGNC:27289}

Function Non-catalytic subunit of the structure-specific, heterodimeric DNA endonuclease

MUS81-EME2 which is involved in the maintenance of genome stability. In the complex, EME2 is required for DNA cleavage, participating in DNA recognition and bending (PubMed:[17289582](#), PubMed:[24371268](#), PubMed:[24813886](#), PubMed:[35290797](#)). MUS81-EME2 cleaves 3'-flaps and nicked Holliday junctions, and exhibit limited endonuclease activity with 5' flaps and nicked double-stranded DNAs (PubMed:[24371268](#)). MUS81-EME2 which is active during the replication of DNA is more specifically involved in replication fork processing (PubMed:[17289582](#), PubMed:[24813886](#)). Replication forks frequently encounter obstacles to their passage, including DNA base lesions, DNA interstrand cross-links, difficult-to-replicate sequences, transcription bubbles, or tightly bound proteins. One mechanism for the restart of a stalled replication fork involves nucleolytic cleavage mediated by the MUS81-EME2 endonuclease. By acting upon the stalled fork, MUS81-EME2 generates a DNA double-strand break (DSB) that can be repaired by homologous recombination, leading to the restoration of an active fork (PubMed:[24813886](#)). MUS81-EME2 could also function in telomere maintenance (PubMed:[24813886](#)).

Cellular Location

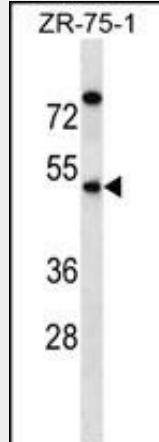
Nucleus.

EME2 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

EME2 Antibody (C-term) - Images



EME2 Antibody (C-term) (Cat. #AP16348b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the EME2 antibody detected the EME2 protein (arrow).

EME2 Antibody (C-term) - Background

EME2 forms a heterodimer with MUS81 (MIM 606591) that functions as an XPF (MIM 278760)-type flap/fork endonuclease in DNA repair (Ciccia et al., 2007 [PubMed 17289582]).

EME2 Antibody (C-term) - References

- Ciccia, A., et al. Mol. Cell 25(3):331-343(2007)
Ciccia, A., et al. J. Biol. Chem. 278(27):25172-25178(2003)
Daniels, R.J., et al. Hum. Mol. Genet. 10(4):339-352(2001)