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Eme1 Polyclonal Antibody

Catalog # AP69724

Product Information

Application	WB, E
Primary Accession	Q96AY2
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63252

Additional Information

Gene ID	146956
Other Names	EME1; MMS4; Crossover junction endonuclease EME1; MMS4 homolog; hMMS4
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

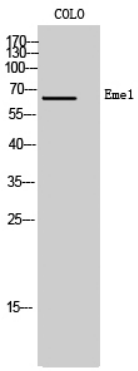
Protein Information

Name	EME1 {ECO:0000303|PubMed:12721304, ECO:0000312|HGNC:HGNC:24965}
Function	Non-catalytic subunit of the structure-specific, heterodimeric DNA endonuclease MUS81-EME1 which is involved in the maintenance of genome stability. In the complex, EME1 is required for DNA cleavage, participating in DNA recognition and bending (PubMed:12686547, PubMed:12721304, PubMed:14617801, PubMed:17289582, PubMed:24733841, PubMed:24813886, PubMed:35290797, PubMed:39015284). MUS81-EME1 cleaves 3'-flaps and nicked Holliday junctions, and exhibit limited endonuclease activity with 5' flaps and nicked double-stranded DNAs (PubMed:24733841, PubMed:35290797). Active during prometaphase, MUS81-EME1 resolves mitotic recombination intermediates, including Holliday junctions, which form during homologous recombination (PubMed:14617801, PubMed:24813886).
Cellular Location	Nucleus, nucleolus. Note=Recruited to regions of DNA damage in S-phase cells

Background

Interacts with MUS81 to form a DNA structure-specific endonuclease with substrate preference for branched DNA structures with a 5'-end at the branch nick. Typical substrates include 3'- flap structures, replication forks and nicked Holliday junctions. May be required in mitosis for the processing of stalled or collapsed replication forks.

Images



Western Blot analysis of COLO cells using Eme1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).