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EME1 Rabbit pAb

Catalog # AP97384

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q96AY2
Other Accession	Q96AY2
Predicted	Rat, Human, Mouse, Rabbit, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63252
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human EME1
Epitope Specificity	412-500/570
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the EME1/MMS4 family.
SUBUNIT	May self-associate. Interacts with MUS81. Interacts withERCC4 and FANCM.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	EME1 complexes with methyl methanesulfonate-sensitive UV-sensitive 81 protein (MUS81) to form an endonuclease complex which cleaves branched DNA structures, especially those arising during stalled DNA replication. The protein may be involved in repairing DNA damage and in maintaining genomic stability. It interacts with specifc DNA structures including nicked Holliday junctions, 3'-flap structures and aberrant replication fork structures. Alternative splicing results in multiple transcript variants.

Additional Information

Gene ID	146956
Other Names	EME1_HUMAN; EME1; Crossover junction endonuclease EME1; Essential meiotic structure-specific endonuclease 1; MMS4 homolog (hMMS4); MMS4; MMS4L; SLX2A; essential meiotic endonuclease 1 homolog 1 (S. pombe); SLX2 structure-specific endonuclease subunit homolog A (S. cerevisiae)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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