

Anti-EME1 Picoband Antibody

Catalog # ABO12490

Product Information

Application	WB, IHC-P
Primary Accession	Q96AY2
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Crossover junction endonuclease EME1(EME1) detection. Tested with WB, IHC-P in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	146956
Other Names	Crossover junction endonuclease EME1, 3.1.22.-, MMS4 homolog, hMMS4, EME1, MMS4
Calculated MW	63252
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Nucleus, nucleolus . Recruited to regions of DNA damage in S-phase cells.
Source	Eukaryota
Protein Name	Crossover junction endonuclease EME1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human EME1 (520-561aa DKERQNLLADIQVRRGEGVTSTSRRIPELSRRRIYLQMTTLQ), different from the related mouse sequence by five amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated

freezing and thawing.

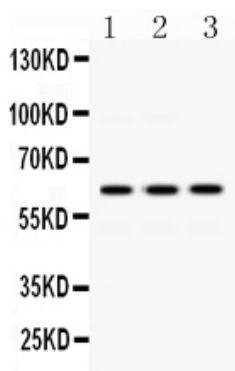
Protein Information

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

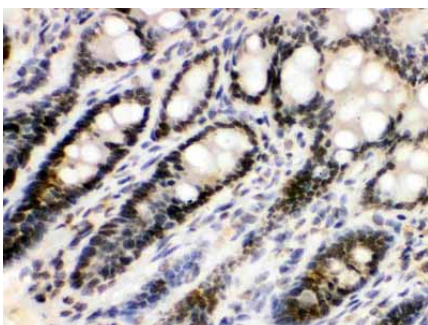
Background

Crossover junction endonuclease EME1 is an enzyme that in humans is encoded by the EME1 gene. It is mapped to 17q21.33. This gene encodes a protein that complexes with methyl methanesulfonate-sensitive UV-sensitive 81 protein to form an endonuclease complex. The encoded protein interacts with specific DNA structures including nicked Holliday junctions, 3'-flap structures and aberrant replication fork structures. Also, this protein may be involved in repairing DNA damage and in maintaining genomic stability. Alternative splicing results in multiple transcript variants.

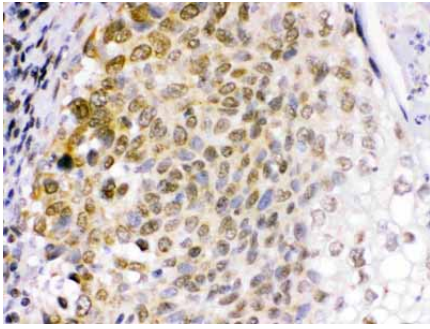
Images



Anti- EME1 Picoband antibody, ABO12490, Western blottingAll lanes: Anti EME1 (ABO12490) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: JURKAT Whole Cell Lysate at 40ugLane 3: HUT Whole Cell Lysate at 40ugPredicted bind size: 62KDObserved bind size: 62KD



Anti- EME1 Picoband antibody, ABO12490,IHC(P)IHC(P): Rat Intestine Tissue



Anti- EME1 Picoband antibody, ABO12490,IHC(P)IHC(P):
Human Lung Cancer Tissue

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