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Anti-EME1 Picoband Antibody
Catalog # ABO12490

Specification

Anti-EME1 Picoband Antibody - 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.

Anti-EME1 Picoband Antibody - Additional Information

Gene ID 146956

Other Names
Crossover junction endonuclease EME1, 3.1.22.-, MMS4 homolog, hMMS4, EME1, MMS4

Calculated MW
63252 MW KDa

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.

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 DKERQNLLADIQVRRGEGVTSTSRRIGPELSRRIYLQMTTLQ), 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 r˚Constitution, 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.**

Anti-EME1 Picoband Antibody - 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

Anti-EME1 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-EME1 Picoband Antibody - Images

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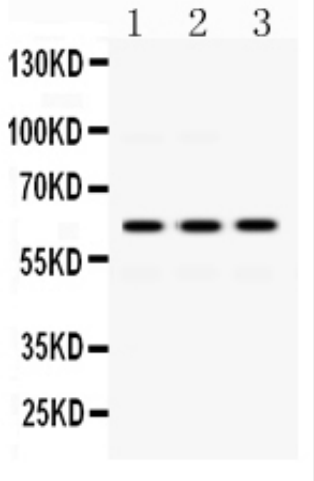
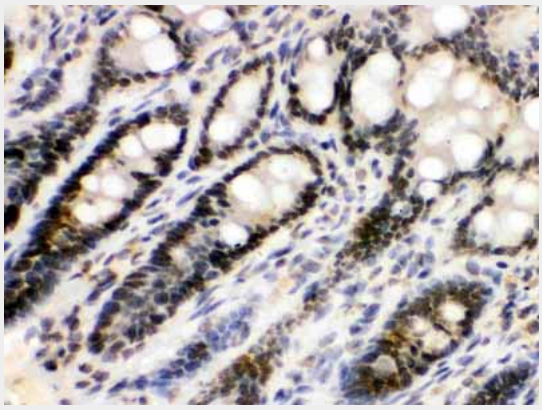
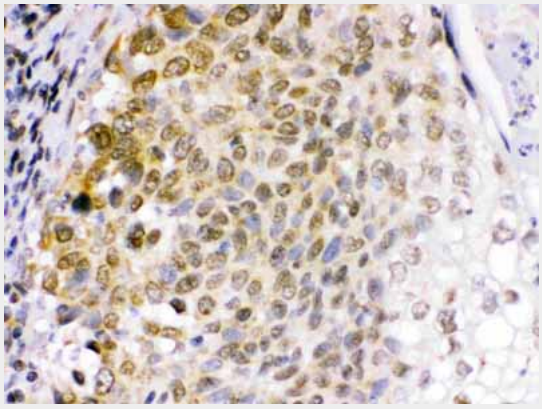


Anti- EME1 Picoband antibody, ABO12490, Western blottingAll lanes: Anti EME1 (ABO12490) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: JURKAT Whole Cell Lysate at 40ugLane 3: HUT Whole Cell Lysate at 40ugPredicted bind size: 62KDObserved bind size: 62KD



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

Anti-EME1 Picoband Antibody - 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 specifc 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.