

**Mouse Anti-EME1 [MTA31 7h2/1]: MC0435, MC0435RTU7**

**Intended Use:** For Research Use Only

**Description:** Essential meiotic endonuclease 1 (Eme1), a member of the Eme1/Mms4 family, associates with Mus81 to constitute a heterodimeric endonuclease that has been implicated in mitotic and meiotic recombination in eukaryotes. The Mus81-Eme1 complex cleaves branched DNA structures, especially those arising during stalled DNA replication such as replication forks and 3' DNA flaps. When purified from yeast, this complex cleaves synthetic Holliday junctions into linear duplex DNA. These findings provide compelling evidence that Mus81-Eme1 complexes are essential elements of the eukaryotic nuclear Holliday junction resolvase. Eme1 may also be required in mitosis for the processing of collapsed replication forks. Eme1 is typically localized to the nucleolus and is recruited to regions of DNA damage in S phase cells.

**Specifications**

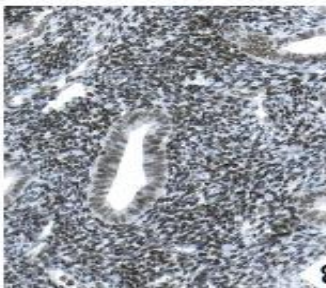
Clone: MTA31 7h2/1  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human  
 Immunogen: His-tagged recombinant Eme1 of human origin  
 Localization: Nucleus  
 Formulation: Protein A/G purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, IF, IP, WB  
 Package:

Description	Catalog No.	Size
EME1 Concentrated	MC0435	1 ml
EME1 Prediluted	MC0435RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Tonsil, HEK293T or U-87 MG cells  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human corpus, uterine tissue stained with anti-EME1 using DAB

**References:**

1. The SMX DNA Repair Tri-nuclease. Haley D M Wyatt, et al. Mol Cell. Mar 2;65(5):848-860.e11, 2017. PubMed: 28257701.
2. Gastroesophageal junction adenocarcinoma displays abnormalities in homologous recombination and nucleotide excision repair. Robin I Dewalt, et al. Lung Cancer (Auckl). Feb 15;5:11-20, 2014. PubMed: 28210138.