

**Mouse Anti-MTDH/LYRIC/AEG1 [2F11C3]: MC0621, MC0621RTU7**

**Intended Use:** For Research Use Only

**Description:** Metastasis adhesion protein, also known as MTDH, LYsine-RIch CEACAM1 co-isolated (LYRIC), is a novel protein that localizes with the tight junction proteins ZO-1 and occludin in polarized epithelial cells. Downregulates SLC1A2/EAAT2 promoter activity when expressed ectopically. Activates the nuclear factor kappa-B transcription factor. Promotes anchorage-independent growth of immortalized melanocytes and astrocytes which is a key component in tumor cell expansion. Widely expressed with highest levels in muscle-dominating organs such as skeletal muscle, heart, tongue and small intestine and in endocrine glands such as thyroid and adrenal gland. Overexpressed in various cancers including breast, brain, prostate, melanoma and glioblastoma multiforme. Promotes lung metastasis and also has an effect on bone and brain metastasis, possibly by enhancing the seeding of tumor cells to the target organ endothelium. Blocking this lung-homing domain with antibodies or inhibiting MTDH with siRNA has been reported to inhibit breast cancer metastasis.

**Specifications:**

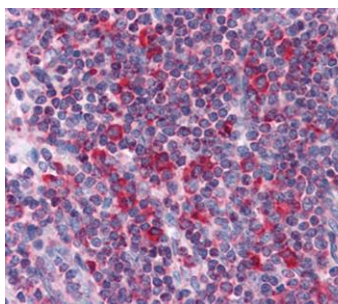
Clone: 2F11C3  
 Source: Mouse  
 Isotype: IgG1  
 Reactivity: Human  
 Immunogen: Purified recombinant fragment of human MTDH expressed in E.coli.  
 Localization: Nucleus, cytoplasm, endoplasmic reticulum membrane  
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, FC, IF, WB  
 Package:

Description	Catalog No.	Size
MTDH/LYRIC/AEG1 [2F11C3] Concentrated	MC0621	1 ml
MTDH/LYRIC/AEG1 [2F11C3] Prediluted	MC0621RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Astrocytoma and ovarian cancer, cerebrum tissue  
 Concentrated Dilution: 20-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes 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 liver stained with anti-MTDH using AEC

**References:**

1. Downregulation of microRNA-216b contributes to glioma cell growth and migration by promoting AEG-1-mediated signaling. Qi Li, et al. Biomed Pharmacother. Aug;104:420-426, 2018.
2. Astrocyte Elevated Gene 1 (AEG-1): A Promising Candidate for Molecular Targeted Therapy in Oral Squamous Cell Carcinomas. Seyedmajidi M, et al. Asian Pac J Cancer Prev 18:3301-3305, 2017.