

LYRIC/AEG1 (2E4) Mouse mAb

Catalog # AP53503

Product Information

Application WB, IHC
Primary Accession Q86UE4
Host Mouse

Clonality Monoclonal Antibody

Calculated MW 63837

Additional Information

Gene ID 92140

Other Names 3D3; AEG1; LYRIC; MTDH

Dilution WB~~1:5000 IHC~~1:100~500

Protein Information

Name MTDH

Synonyms AEG1, LYRIC

Function Down-regulates SLC1A2/EAAT2 promoter activity when expressed

ectopically. Activates the nuclear factor kappa-B (NF-kappa-B) transcription

factor. Promotes anchorage-independent growth of immortalized melanocytes and astrocytes which is a key component in tumor cell expansion. 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. Induces chemoresistance.

Cellular Location Endoplasmic reticulum membrane; Single-pass membrane protein. Nucleus

membrane; Single-pass membrane protein. Cell junction, tight junction Nucleus, nucleolus. Cytoplasm, perinuclear region Note=In epithelial cells, recruited to tight junctions (TJ) during the maturation of the TJ complexes. A nucleolar staining may be due to nuclear targeting of an isoform lacking the transmembrane domain (By similarity). TNF-alpha causes translocation from

the cytoplasm to the nucleus.

Tissue Location Widely expressed with highest levels in muscle- dominating organs such as

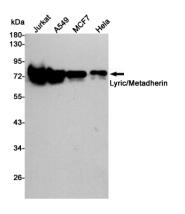
skeletal muscle, heart, tongue and small intestine and in endocrine glands such as thyroid and adrenal gland Overexpressed in various cancers including

breast, brain, prostate, melanoma and glioblastoma multiforme.

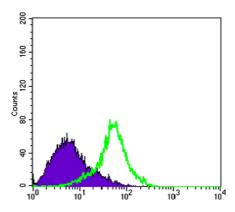
Background

Swiss-Prot Acc.Q86UE4.Metadherin (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. At the tight junction, it acts not as a structural component, but is rather recruited during the maturation of the tight junction complex. Metadherin is overexpressed in breast cancer tissue and breast tumor xenografts, while much lower levels are expressed in normal breast tissue. Metadherin binds to lung vasculature, one of the four common sites of breast cancer metastasis, through a C-terminal segment in the extracellular domain; blocking this lung-homing domain with antibodies or inhibiting metadherin with siRNA has been reported to inhibit breast cancer metastasis.

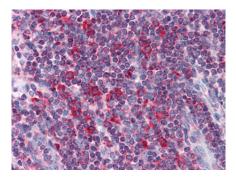
Images



Western blot detection of Lyric/Metadherin in Jurkat, A549, MCF7 and Hela cell lysates using Lyric/Metadherin mouse mAb (1:5000 diluted). Predicted band size:64KDa. Observed band size:75KDa.



Flow cytometric analysis of Hela cells using Metadherin mouse mAb (green) and negative control (purple).



Immunohistochemical analysis of paraffin-embedded human Liver tissues using Metadherin mouse mAb

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