

## **Product datasheet for TA354924**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## LYRIC (MTDH) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: WB

Recommended Dilution: WB 0.1-1 μg/ml ELISA 0.01-0.1 μg/ml IP 2-5 μg/ml IHC 2-10 μg/ml FC 5-10 μg/ml

Reactivity: Human, Mouse, Rat, Bovine

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** A synthetic peptide derived from a phosphrylation site of serine 568 surrounding the epitope

-TSWESPKQI-of human AEG1. This sequence is identical to human, mouse, rat and bovine.

Formulation: This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing

antibody stabilizer.

**Purification:** The Rabbit IgG is purified by site-modified Epitope Affinity Purification.

**Conjugation:** Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: ~64 kDa

Gene Name: metadherin

Database Link: NP 848927

Entrez Gene 67154 MouseEntrez Gene 170910 RatEntrez Gene 92140 Human

Q86UE4





Background:

AEG1 (Astrocyte elevated gene 1), also called MTDH (Metadherin), or L LYsine-RIch CEACAM1 co-isolated (LYRIC), is 582 aa single transmembrane domain (TMD) protein. It is widely expressed and highly conserved between species. It is recruited during the maturation of the tight junction complex and co-localizes with tight junction proteins ZO-1 and occludin in polarized epithelial cells. AEG-1 is involved in several crucial aspects of tumor progression, including transformation, evasion of apoptosis, invasion, metastasis, and chemoresistance. Overexpression of AEG-1 is frequently observed in melanoma, glioma, neuroblastoma, and carcinomas of breast, prostate, liver, and esophagus and is correlated with poor clinical outcomes. AEG-1 functions as a downstream mediator of the transforming activity of oncogenic Ha-Ras and c-Myc. Furthermore, AEG-1 overexpression activates the PI3K/Akt, nuclear factor ?B (NF?B), and Wnt/ $\beta$ -catenin signaling pathways to stimulate proliferation, invasion, cell survival, and chemoresistance. The lung-homing domain of AEG-1 also mediates the adhesion of tumor cells to the vasculature of distant organs and promotes metastasis. These findings suggest that therapeutic targeting of AEG-1 may simultaneously suppress tumor growth, block metastasis, and enhance the efficacy of

Synonyms: 3D3; AEG-1; AEG1; LYRIC

**Protein Families:** Transmembrane

## **Product images:**



WB: The cell lysate derived from HELA cells treated by TNF-a (20 ng/ml, for 60 min) was immuno-blotted by Rabbit anti-phosphospecific AEG1 (pS568) at 1:500. An immunoreactive band around 64kDa is observed.