

# Rabbit anti AEG1(pS568) Polyclonal Antibody

Alternative Name(s): Metadherin; 3D3; AEG1; AEG-1; LYRIC; LYRIC/3D3

### **Order Information**

Description: AEG1(pS568)
Catalogue: 630-080
Lot: See label
Size: 100ug/200ul
Host: Rabbit
Clone: nan

• Application: IHC(P), WB • Reactivity: Hu, Ms, Rt, Bv

#### **ANTIGEN PREPARATION**

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.

#### **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 κB (NFκB), and Wnt/β-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

#### **PURIFICATION**

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

## **FORMULATION**

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

#### **SPECIFICITY**

This antibody recognizes phosphospecific AEG1at surrounding Serine 568. It does not recognize non-phosphspecific site S568. This antibody reacts with human, mouse and rat origins. The other species are not tested.

## **STORAGE**

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

#### **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

• Western Blot: 0.1-1 μg/ml

ELISA: 0.01-0.1 µg/ml

• Immunoprecipitation: 2-5 µg/ml

• IHC: 2-10 µg/ml

Flow cytometry: Not tested

• Molecular Weight: 64.0

· Positive Control: Kidney Tissue

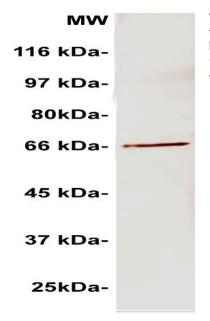
#### FOR RESEARCH USE ONLY.



• Cellular Location: Cell Membrane

\*Optimal dilutions should be determined by researchers for the specific applications.





Western Blot: The cell lysate derived from HELA cells treated by TNF-a (20 ng/ml, for 60 min) was immunoblotted by Rabbit anti phosphospecific AEG1 (pS568) (Cat#630-080) at 1:500. An immunoreactive band around 64kDa is observed.

## **REFERENCES**