Data Sheet (Cat.No.TMAY-02365)

TargetMol

Anti-CALML3 Antibody (1W13)

Product Details

Ig Type:	Mouse IgG1
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	1W13
Purification:	Protein A

Applications

Verified Activity:	Flow cytometric analysis of Human CALML3 expression on A431 cells. The cells were treated according to manufacturer's manual (BD Pharmingen™ Cat. No. 554714), stained with purified anti-Human CALML3, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.
Application:	FCM
Recommended	FCM: 1:25-1:100

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human CALML3 Protein (TMPY-02760)
Antigen Species:	Human
Synonyms:	CLP;calmodulin-like 3

Research Background

Calmodulin-like protein 3 (CALML3) is similar to that of authentic calmodulin and may actually compete with calmodulin by binding, with different affinity, to cellular substrates. Calmodulin-like protein 3 (CALML3) is a tumor-sensitive protein specifically expressed in normal epithelial cells but downregulated in tumorigenesis. Downregulation of the protein is an early event in breast cancer development. One of the most pressing questions raised by the discovery of CLP/CALML3 is that of its potential targets. Although it is 85% identical to human calmodulin, the distinct properties of CLP suggest that it has specific targets or targets that only partially overlap with those of calmodulin. Research has identified the unconventional myosin-10 (Myo10) as a specific target of CALML3. The discovery of Myo10 as a specific target of CALML3 is highly significant and suggests multiple lines of further research such as investigations of the Ca2+ regulation of Myo10 and the role of the loss of CLP in epithelial differentiation, adhesion, and cancer. Cells expressing CALML3 displayed a striking increase in the number and length of myosin-10-positive filopodia and showed increased mobility in a wound healing assay.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481