

# Mouse Monoclonal Antibody to AKT3

Purified Mouse Monoclonal Antibody Catalog # AO2397a

#### **Product Information**

**Application** WB, FC, ICC, E **Primary Accession** P19022 Reactivity Human Host Mouse Clonality Monoclonal **Clone Names** 5H7C3 Isotype Mouse IgG2a 99809 **Calculated MW** 

**Description** This gene encodes a classical cadherin and member of the cadherin

superfamily. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein is proteolytically processed to generate a calcium-dependent cell adhesion molecule and glycoprotein. This protein plays a role in the establishment of left-right asymmetry, development of the

nervous system and the formation of cartilage and bone.;

**Immunogen** Purified recombinant fragment of human AKT3 (AA: 37-150) expressed in E.

Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

**Application Note** ELISA: 1/10000; WB: 1/500 - 1/2000; ICC: 1/50 - 1/250; FCM: 1/200 - 1/400

### **Additional Information**

**Gene ID** 1000

Other Names CDHN; NCAD; CD325; CDw325

**Dilution** WB~~1:1000 FC~~1:10~50 ICC~~N/A E~~N/A

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**Mouse Monoclonal Antibody to AKT3 is for research use only and not for use

in diagnostic or therapeutic procedures.

#### **Protein Information**

Name CDH2

#### **Synonyms**

CDHN, NCAD

#### **Function**

Calcium-dependent cell adhesion protein; preferentially mediates homotypic cell-cell adhesion by dimerization with a CDH2 chain from another cell.

Cadherins may thus contribute to the sorting of heterogeneous cell types.

Acts as a regulator of neural stem cells quiescence by mediating anchorage of neural stem cells to ependymocytes in the adult subependymal zone: upon cleavage by MMP24, CDH2-mediated anchorage is affected, leading to modulate neural stem cell quiescence. Plays a role in cell-to-cell junction formation between pancreatic beta cells and neural crest stem (NCS) cells, promoting the formation of processes by NCS cells (By similarity). Required for proper neurite branching. Required for pre- and postsynaptic organization (By similarity). CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density.

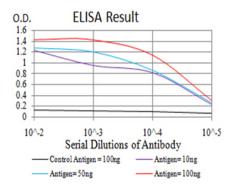
#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P15116}. Cell junction. Cell surface {ECO:0000250|UniProtKB:P15116}. Cell junction, desmosome {ECO:0000250|UniProtKB:P15116}. Cell junction, adherens junction {ECO:0000250|UniProtKB:P15116}. Note=Colocalizes with TMEM65 at the intercalated disk in cardiomyocytes. Colocalizes with OBSCN at the intercalated disk and at sarcolemma in cardiomyocytes {ECO:0000250|UniProtKB:P15116}

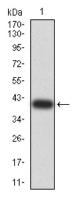
#### References

1.Mol Med Rep. 2015 Aug;12(2):2999-3006.; 2.BMC Cancer. 2013 Jun 26;13:309.;

## **Images**

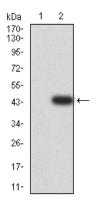


Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

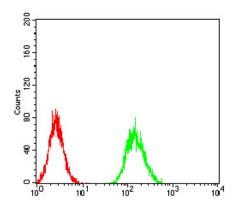


Western blot analysis using AKT3 mAb against human AKT3 (AA: 37-150) recombinant protein. (Expected MW is 39.5 kDa)

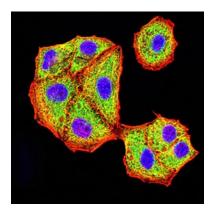
Western blot analysis using AKT3 mAb against HEK293 (1) and AKT3 (AA: 37-150)-hIgGFc transfected HEK293 (2) cell



lysate.



Flow cytometric analysis of Hela cells using AKT3 mouse mAb (green) and negative control (red).



Immunofluorescence analysis of Hela cells using AKT3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.