

**Mouse Monoclonal Antibody to AKT3**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2397a****Specification**

---

**Mouse Monoclonal Antibody to AKT3 - Product Information**

Application	<b>E, WB, FC, ICC</b>
Primary Accession	<a href="#">P19022</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>Mouse IgG2a</b>
Calculated MW	<b>55.8kDa KDa</b>

**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 preprotein 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

**Mouse Monoclonal Antibody to AKT3 - Additional Information**

**Gene ID** 1000

**Other Names**

CDHN; NCAD; CD325; CDw325

**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.

**Mouse Monoclonal Antibody to AKT3 - 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

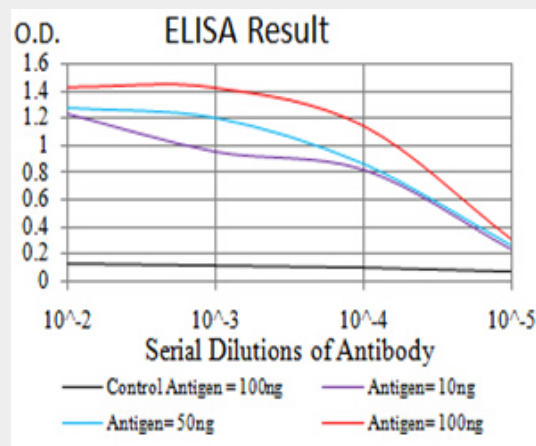
Cell membrane; Single-pass type I membrane protein. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P15116}. Cell junction. Cell surface {ECO:0000250|UniProtKB:P15116}. Cell junction, desmosome {ECO:0000250|UniProtKB:P15116}. Cell junction, adherens junction {ECO:0000250|UniProtKB:P15116}. Note=Colocalizes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

## Mouse Monoclonal Antibody to AKT3 - Protocols

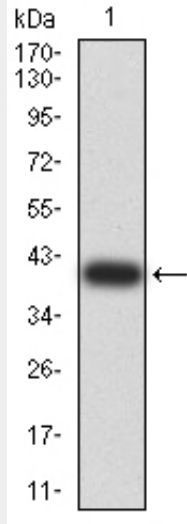
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

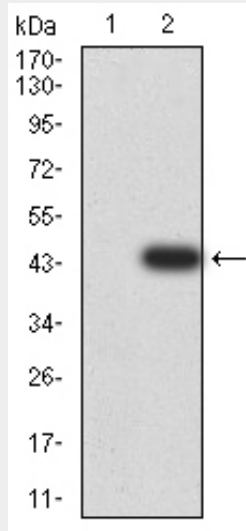
## Mouse Monoclonal Antibody to AKT3 - Images



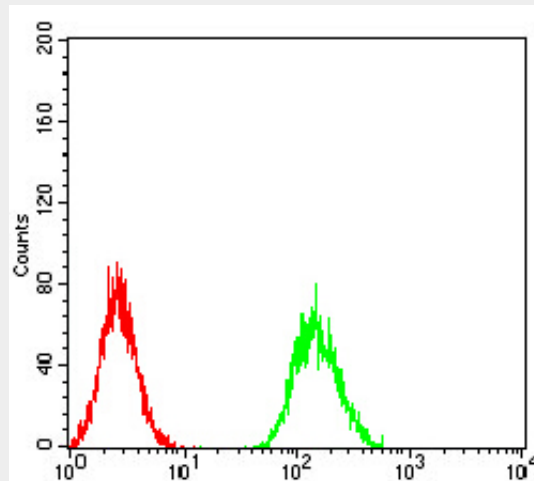
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



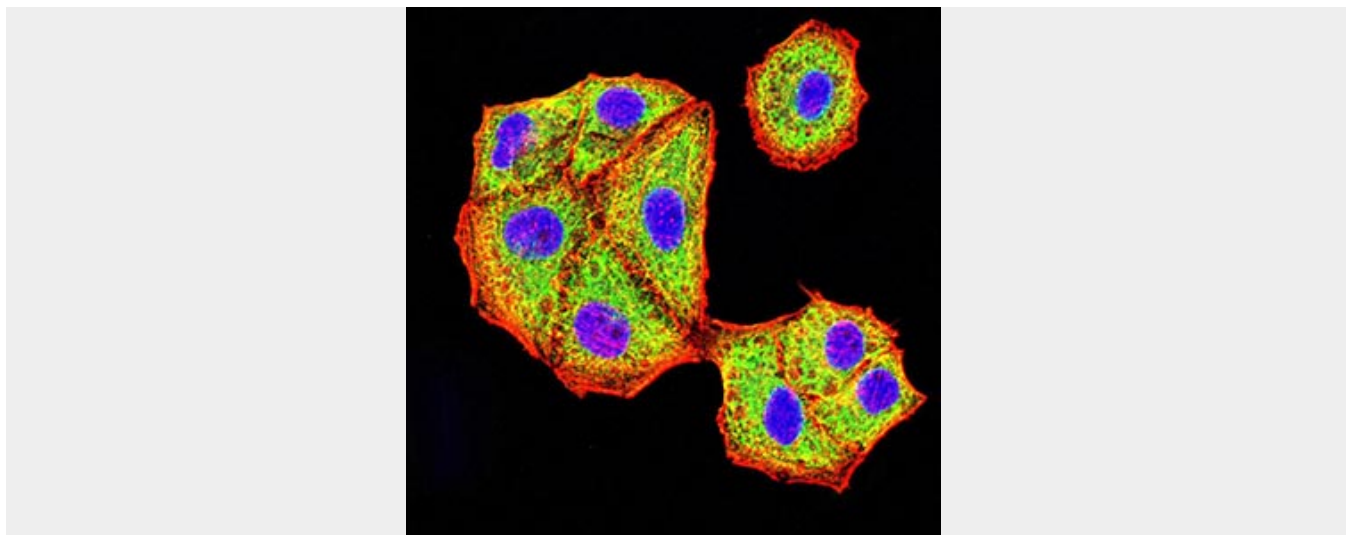
Western blot analysis using AKT3 mAb against human AKT3 (AA: 37-150) recombinant protein. (Expected MW is 39.5 kDa)



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

#### **Mouse Monoclonal Antibody to AKT3 - References**

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