

# Mouse Monoclonal Antibody to AKT3

Purified Mouse Monoclonal Antibody Catalog # AO2398a

# **Product Information**

Application Primary Accession Reactivity Host Clonality Clone Names Isotype Calculated MW Description	WB, FC, E P19022 Human Mouse Monoclonal 7B7A2 Mouse IgG1 99809 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; FCM: 1/200 - 1/400

## **Additional Information**

Gene ID	1000
Other Names	CDHN; NCAD; CD325; CDw325
Dilution	WB~~1:1000 FC~~1:10~50 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

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).

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