

## PIK3C2B Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant PIK3C2B. Catalog # AT3309a

#### **Product Information**

**Application** WB, IF, E **Primary Accession 000750 Other Accession** NM 002646 Reactivity Human Host Mouse Clonality monoclonal Isotype IgG2a Kappa **Clone Names** 3E6

Clone Names 3E6 Calculated MW 184768

### **Additional Information**

**Gene ID** 5287

Other Names Phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit

beta, PI3K-C2-beta, PtdIns-3-kinase C2 subunit beta, C2-PI3K,

Phosphoinositide 3-kinase-C2-beta, PIK3C2B

**Target/Specificity** PIK3C2B (NP\_002637, 1 a.a. ~ 110 a.a) partial recombinant protein with GST

tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 IF~~1:50~200 E~~N/A

**Format** Clear, colorless solution in phosphate buffered saline, pH 7.2.

**Storage** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** PIK3C2B Antibody (monoclonal) (M02) is for research use only and not for use

in diagnostic or therapeutic procedures.

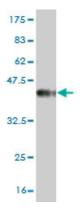
## **Background**

The protein encoded by this gene belongs to the phosphoinositide 3-kinase (PI3K) family. PI3-kinases play roles in signaling pathways involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking. This protein contains a lipid kinase catalytic domain as well as a C-terminal C2 domain, a characteristic of class II PI3-kinases. C2 domains act as calcium-dependent phospholipid binding motifs that mediate translocation of proteins to membranes, and may also mediate protein-protein interactions. The PI3-kinase activity of this protein is sensitive to low nanomolar levels of the inhibitor wortmanin. The C2 domain of this protein was shown to bind phospholipids but not Ca2+, which suggests that this enzyme may function in a calcium-independent manner.

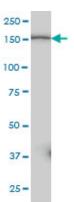
### References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Physiogenomic analysis of statin-treated patients: domain-specific counter effects within the ACACB gene on low-density lipoprotein cholesterol? Rua?o G, et al. Pharmacogenomics, 2010 Jul. PMID 20602615.Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.Pooled analysis of phosphatidylinositol 3-kinase pathway variants and risk of prostate cancer. Koutros S, et al. Cancer Res, 2010 Mar 15. PMID 20197460.Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.

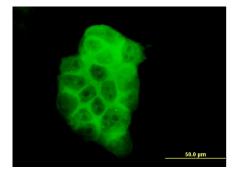
## **Images**



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa).

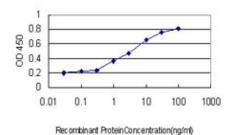


PIK3C2B monoclonal antibody (M02), clone 3E5 Western Blot analysis of PIK3C2B expression in A-431 ( (Cat # AT3309a )



Immunofluorescence of monoclonal antibody to PIK3C2B on A-431 cell. [antibody concentration 10 ug/ml]

Detection limit for recombinant GST tagged PIK3C2B is approximately 1ng/ml as a capture antibody.



# Citations

• Association of Factor V Secretion with Protein Kinase B Signaling in Platelets from Horses with Atypical Equine Thrombasthenia.

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