

## FOXO3A Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant FOXO3A. Catalog # AT2101a

## **Specification**

# FOXO3A Antibody (monoclonal) (M02) - Product Information

IHC, IF, E Application **Primary Accession** 043524 Other Accession BC021224 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 Kappa Calculated MW 71277

# FOXO3A Antibody (monoclonal) (M02) - Additional Information

#### **Gene ID 2309**

#### **Other Names**

Forkhead box protein O3, AF6q21 protein, Forkhead in rhabdomyosarcoma-like 1, FOXO3, FKHRL1, FOXO3A

#### **Target/Specificity**

FOXO3A (AAH21224, 361 a.a.  $\sim$  460 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

### **Dilution**

IHC~~1:100~500 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**

FOXO3A Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

## FOXO3A Antibody (monoclonal) (M02) - Protocols

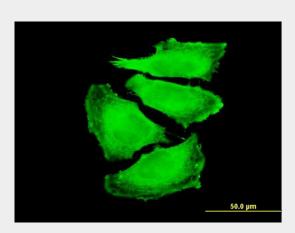
Provided below are standard protocols that you may find useful for product applications.

• Western Blot

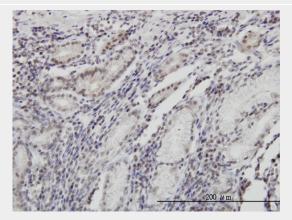


- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

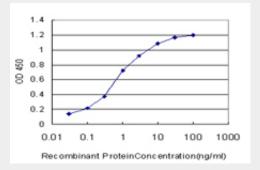
# FOXO3A Antibody (monoclonal) (M02) - Images



Immunofluorescence of monoclonal antibody to FOXO3 on HeLa cell . [antibody concentration 10 ug/ml]

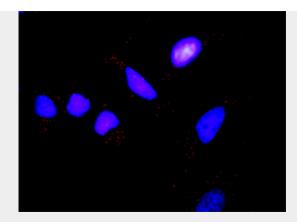


Immunoperoxidase of monoclonal antibody to FOXO3A on formalin-fixed paraffin-embedded human stomach. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged FOXO3A is approximately 0.03ng/ml as a capture antibody.





Proximity Ligation Analysis of protein-protein interactions between IKBKB and FOXO3. HeLa cells were stained with anti-IKBKB rabbit purified polyclonal 1:1200 and anti-FOXO3 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

# FOXO3A Antibody (monoclonal) (M02) - Background

This gene belongs to the forkhead family of transcription factors which are characterized by a distinct forkhead domain. This gene likely functions as a trigger for apoptosis through expression of genes necessary for cell death. Translocation of this gene with the MLL gene is associated with secondary acute leukemia. Alternatively spliced transcript variants encoding the same protein have been observed.

## FOXO3A Antibody (monoclonal) (M02) - References

An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M, et al. Hum Genet, 2010 Oct. PMID 20677014.FOXO3 encodes a carcinogen-activated transcription factor frequently deleted in early-stage lung adenocarcinoma. Mikse OR, et al. Cancer Res, 2010 Aug 1. PMID 20631076.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.Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.Foxo3a regulates apoptosis by negatively targeting miR-21. Wang K, et al. J Biol Chem, 2010 May 28. PMID 20371612.