

# **RICTOR Antibody (clone 1F3)**

Mouse Monoclonal Antibody Catalog # ALS14493

## **Specification**

### RICTOR Antibody (clone 1F3) - Product Information

Application WB, IP, IHC
Primary Accession O6R327
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 192kDa KDa

# RICTOR Antibody (clone 1F3) - Additional Information

Gene ID 253260

#### **Other Names**

Rapamycin-insensitive companion of mTOR, AVO3 homolog, hAVO3, RICTOR {ECO:0000312|EMBL:EAW55980.1}

# Target/Specificity

**Human RICTOR** 

#### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

#### **Precautions**

RICTOR Antibody (clone 1F3) is for research use only and not for use in diagnostic or therapeutic procedures.

# RICTOR Antibody (clone 1F3) - Protein Information

Name RICTOR (HGNC:28611)

#### **Function**

Subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals. mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-422'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. Plays an essential role in embryonic growth and development.

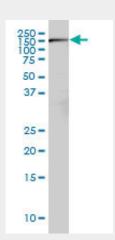


# RICTOR Antibody (clone 1F3) - Protocols

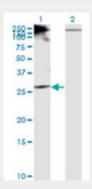
Provided below are standard protocols that you may find useful for product applications.

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

# RICTOR Antibody (clone 1F3) - Images

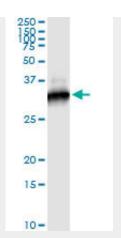


RICTOR monoclonal antibody (M01), clone 1F3 Western blot of RICTOR expression in HeLa NE.

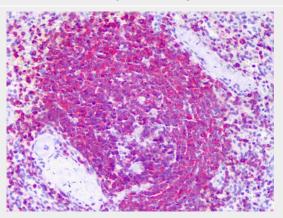


Western blot of RICTOR expression in transfected 293T cell line by RICTOR monoclonal antibody...





Immunoprecipitation of RICTOR transfected lysate using anti-RICTOR monoclonal antibody and...



Anti-RICTOR antibody IHC of human spleen.

# RICTOR Antibody (clone 1F3) - Background

Subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals. mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-422'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. Plays an essential role in embryonic growth and development.

## RICTOR Antibody (clone 1F3) - References

Sarbassov D.D.,et al.Curr. Biol. 14:1296-1302(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Schmutz J.,et al.Nature 431:268-274(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Ohara O.,et al.DNA Res. 9:47-57(2002).