

MAPKAP1 Polyclonal Antibody

Catalog No: #42671

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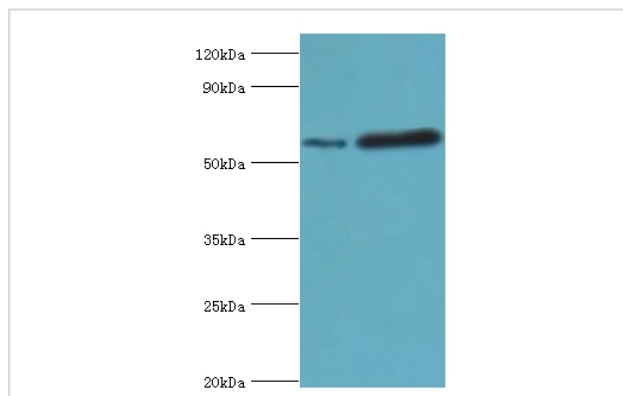
Description

Product Name	MAPKAP1 Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antigen Affinity Purified
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total MAPKAP1 polyclonal antibody.
Immunogen Type	protein
Immunogen Description	Recombinant human Target of rapamycin complex 2 subunit MAPKAP1 protein (1-290aa)
Target Name	MAPKAP1
Other Names	TORC2 subunit MAPKAP1, Mitogen-activated protein kinase 2-associated protein 1, Stress-activated map kinase-interacting protein 1, SAPK-interacting protein 1, mSIN1, MAPKAP1, MIP1, SIN1
Accession No.	Swiss-Prot#: Q9BPZ7
Uniprot	Q9BPZ7
GeneID	79109;
Calculated MW	59kd
Concentration	1.0mg/mL
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage	Store at -20°C

Application Details

Western blotting: □ 1:500 - 1:2000

Images



All lanes: Target of rapamycin complex 2 subunit MAPKAP1 antibody at 2ug/ml
 Lane 1: Hela whole cell lysate
 Lane 2: MCF-7 whole cell lysate
 secondary
 Goat polyclonal to rabbit at 1/10000 dilution
 predicted band size :59kDa
 observed band size :59kDa

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'. Within mTORC2, MAPKAP1 is required for complex formation and mTORC2 kinase activity. MAPKAP1 inhibits MAP3K2 by preventing its dimerization and autophosphorylation. Inhibits HRAS and KRAS signaling. Enhances osmotic stress-induced phosphorylation of ATF2 and ATF2-mediated transcription. Involved in ciliogenesis, regulates cilia length through its interaction with CCDC28B independently of mTORC2 complex.

References

[1]"The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC)."The MGC Project Team Genome Res. 14:2121-2127(2004). [2]"SIN1/MIP1 maintains rictor-mTOR complex integrity and regulates Akt phosphorylation and substrate specificity."Jacinto E., Facchinetti V., Liu D., Soto N., Wei S., Jung S.Y., Huang Q., Qin J., Su B.Cell 127:125-137(2006). [3]"mSin1 is necessary for Akt/PKB phosphorylation, and its isoforms define three distinct mTORC2s." Frias M.A., Thoreen C.C., Jaffe J.D., Schroder W., Sculley T., Carr S.A., Sabatini D.M.Curr. Biol. 16:1865-1870(2006).

Note: This product is for in vitro research use only