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DANRE stk3(36kDa subunit) Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # Azb10042a

Product Information

Application	WB, E
Primary Accession	Q7ZUQ3
Reactivity	Human, Rat, Mouse, Zebrafish
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB47395
Calculated MW	56081

Additional Information

Gene ID	324125
Other Names	Serine/threonine-protein kinase 3, Serine/threonine-protein kinase 3 36kDa subunit, MST2/N, Serine/threonine-protein kinase 3 20kDa subunit, MST2/C, stk3
Target/Specificity	This DANRE stk3(36kDa subunit) antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 228-252 amino acids from the Central region of DANRE stk3(36kDa subunit).
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DANRE stk3(36kDa subunit) Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	stk3
Function	Stress-activated, pro-apoptotic kinase which, following caspase-cleavage, enters the nucleus and induces chromatin condensation followed by internucleosomal DNA fragmentation. Key component of the Hippo signaling pathway which plays a pivotal role in organ size control and tumor

suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein stk3/mst2 and stk4/mst1, in complex with its regulatory protein sav1, phosphorylates and activates lats1/2 in complex with its regulatory protein mob1, which in turn phosphorylates and inactivates yap1 oncoprotein and wwtr1/taz. Phosphorylation of yap1 by lats2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration.

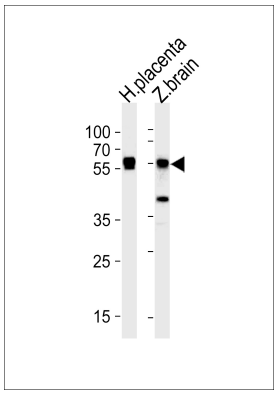
Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q13188}. Nucleus {ECO:0000250|UniProtKB:Q13188}. Note=The caspase-cleaved form cycles between nucleus and cytoplasm. {ECO:0000250|UniProtKB:Q13188}

Background

Stress-activated, pro-apoptotic kinase which, following caspase-cleavage, enters the nucleus and induces chromatin condensation followed by internucleosomal DNA fragmentation. Key component of the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein stk3/mst2 and stk4/mst1, in complex with its regulatory protein sav1, phosphorylates and activates lats1/2 in complex with its regulatory protein mob1, which in turn phosphorylates and inactivates yap1 oncoprotein and wwtr1/taz. Phosphorylation of yap1 by lats2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration (By similarity).

Images



Western blot analysis of lysates from huaman placenta and zebra fish brain tissue (from left to right),using Zebrafishstk3(36kDa subunit) Antibody (Center)(Cat. #Azb10042a).Azb10042a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.