

STK3 (36kDa subunit) Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # Azb10042a**Specification**

STK3 (36kDa subunit) Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q13188
Other Accession	Q7ZUQ3
Reactivity	Human, Zebrafish
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

STK3 (36kDa subunit) Antibody (Center) - Additional Information**Gene ID** 6788**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 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 human 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

STK3 (36kDa subunit) Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

STK3 (36kDa subunit) Antibody (Center) - Protein Information**Name** STK3 ([HGNC:11406](#))**Function** Stress-activated, pro-apoptotic kinase which, following caspase-cleavage, enters the

nucleus and induces chromatin condensation followed by internucleosomal DNA fragmentation (PubMed:[11278283](#), PubMed:[8566796](#), PubMed:[8816758](#)). 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 (PubMed:[15688006](#), PubMed:[16930133](#), PubMed:[23972470](#), PubMed:[28087714](#), PubMed:[29063833](#), PubMed:[30622739](#)). Phosphorylation of YAP1 by LATS2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration (PubMed:[15688006](#), PubMed:[16930133](#), PubMed:[23972470](#), PubMed:[28087714](#)). STK3/MST2 and STK4/MST1 are required to repress proliferation of mature hepatocytes, to prevent activation of facultative adult liver stem cells (oval cells), and to inhibit tumor formation. Phosphorylates NKX2-1 (By similarity). Phosphorylates NEK2 and plays a role in centrosome disjunction by regulating the localization of NEK2 to centrosome, and its ability to phosphorylate CROCC and CEP250 (PubMed:[21076410](#), PubMed:[21723128](#)). In conjunction with SAV1, activates the transcriptional activity of ESR1 through the modulation of its phosphorylation (PubMed:[21104395](#)). Positively regulates RAF1 activation via suppression of the inhibitory phosphorylation of RAF1 on 'Ser-259' (PubMed:[20212043](#)). Phosphorylates MOBKL1A and RASSF2 (PubMed:[19525978](#)). Phosphorylates MOBKL1B on 'Thr- 74'. Acts cooperatively with MOBKL1B to activate STK38 (PubMed:[18328708](#), PubMed:[18362890](#)).

Cellular Location

Cytoplasm. Nucleus Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=The caspase-cleaved form cycles between nucleus and cytoplasm (PubMed:[11278283](#), PubMed:[19525978](#)) Phosphorylation at Thr-117 leads to inhibition of nuclear translocation (PubMed:[19525978](#)).

Tissue Location

Expressed at high levels in adult kidney, skeletal and placenta tissues and at very low levels in adult heart, lung and brain tissues.

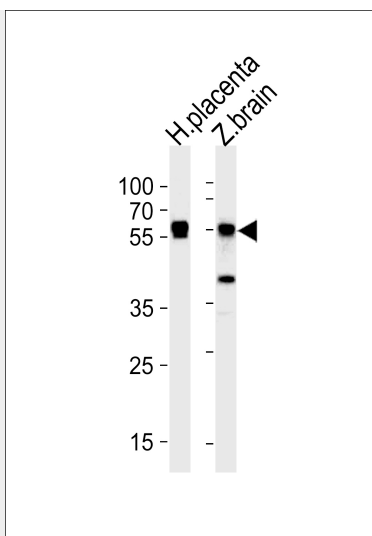
STK3 (36kDa subunit) Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

STK3 (36kDa subunit) Antibody (Center) - Images





Western blot analysis of lysates from human placenta and zebra fish brain tissue (from left to right), using STK3 (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.

STK3 (36kDa subunit) Antibody (Center) - 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).