Hippo Signaling Antibody Kit

HAK21009

Contains Product	Specification	Applications	Species reactivity	MW(kDa)
MOB1A[ER61553]	20μl	WB	H,M,R	23 kDa
YAP1[ET1608-30]	20μl	WB,IF-Cell,IF-Tissue,IHC-P,IP,FC	H,R	54 kDa
LATS1/2[ER63847]	20μl	WB,IHC-P,ICC/IF,ELISA	H,M	130-140 kDa
Mst2[ET1610-8]	20μl	WB,IHC-P,IP	H,M	56 kDa
MST1[HA500031]	20μl	WB,IHC-P	H,M	57 kDa.
Phospho-YAP1 (S127)[ET1611-69]	20μl	WB,IHC-P	H,M,R	54 kDa
TAZ[HA500300]	20μl	WB,IHC-P,IF-Cell	H,M	44 kDa
HRP-Goatanti-RabbitIgG[HA1001]	100μl	WB,ELISA,IHC-P	Rab	

Description: The Hippo Signaling Antibody Sampler Kit provides an economical means of detecting target proteins of the Hippo signaling pathway. The kit contains enough primary antibody to perform two western blots per primary.

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Background Hippo signaling is an evolutionarily conserved pathway that controls cell proliferation, apoptosis, and organ size in response to changing cell density levels. At relative low cell density, transcription co-activators YAP and TAZ bind transcription factors to induce expression of genes that favor cell growth and proliferation. As cell density increases, interaction between membrane-bound upstream hippo pathway regulators trigger activation of cytoplasmic kinases Mst1/2 and LATS1/2. Activated Mst kinase (the eponymous Hippo in Drosophila) associates with the adaptor Sav1 and phosphorylates MOB1 to activate LATS kinase, which phosphorylates YAP and TAZ to suppress cell proliferation.

Database links: UniProt ID: Q9H8S9, P46937, Q2EJA0, O95835, Q9NRM7, Q13188, Q9JI11, O54748, Q13043, Q9JI11, P46937, P46938, Q2EJA0, Q9GZV5, Q9EPK5

Images

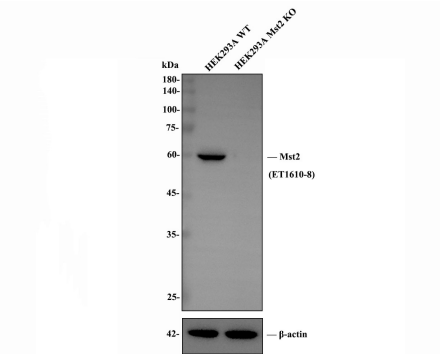

Fig1: Fig1: All lanes: Western blot analysis of Mst2 with anti-Mst2 antibody [SC05-83] (ET1610-8) at 1:1,000 dilution.
Lane 1: Wild-type HEK293A whole cell lysate (20 µg).
Lane 2: MST1/2 double knockout HEK293A whole cell lysate (20 µg).

ET1610-8 was shown to specifically react with Mst2 in Wild-type HEK293A cells. No band was observed when Mst2 knockout samples were tested. Wild-type and Mst2 knockout samples were subjected to SDS-PAGE. Proteins were transferred to a PVDF membrane and blocked with 5% NFDM in TBST for 1 hour at room temperature. The primary Anti-Mst2 antibody (ET1610-8, 1/1,000) and Anti-β-actin antibody (R1207-1, 1/1,000) were used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG H&L (HRP) Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

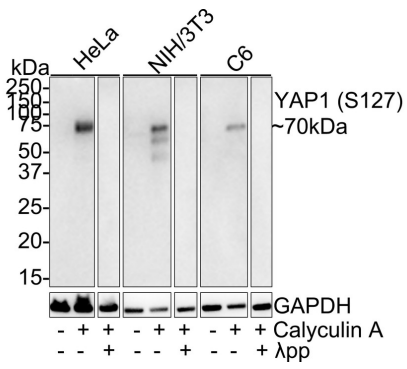

Fig2: Western blot analysis of Phospho-YAP1 (S127) on different lysates with Rabbit anti-Phospho-YAP1 (S127) antibody (ET1611-69) at 1/5,000 dilution.

Lane 1: HeLa whole cell lysate
Lane 2: HeLa treated with 100nM Calyculin A for 30 minutes whole cell lysate
Lane 3: HeLa treated with 100nM Calyculin A for 30 minutes then treated with λpp for 1 hour whole cell lysate
Lane 4: NIH/3T3 whole cell lysate
Lane 5: NIH/3T3 treated with 100nM Calyculin A for 30 minutes whole cell lysate
Lane 6: NIH/3T3 treated with 100nM Calyculin A for 30 minutes then treated with λpp for 1 hour whole cell lysate
Lysates/proteins at 10 µg/Lane.
Lane 7: C6 whole cell lysate
Lane 8: C6 treated with 100nM Calyculin A for 30 minutes whole cell lysate
Lane 9: C6 treated with 100nM Calyculin A for 30 minutes then treated with λpp for 1 hour whole cell lysate

Predicted band size: 54 kDa
Observed band size: 70 kDa

Exposure time: 1 minute 6 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1611-69) at 1/5,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

Background References

1. McNeill, H. and Woodgett, J.R. (2010) Nat Rev Mol Cell Biol 11, 404-13.
2. Zeng, Q. and Hong, W. (2008) Cancer Cell 13, 188-92.
3. Zhao, B. et al. (2007) Genes Dev 21, 2747-61.