

Immunotag™ STK4 Antibody

Antibody Specification	
Catalog No.	ITA7697
Product Description	Immunotag™ STK4 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	STK4
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,ELISA
Recommended Dilution	WB 1:1000-3000 IHC 1:50-1:200
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human STK4
Specificity	STK4 Antibody detects endogenous levels of total STK4
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	STK4
Accession No.	Q13043
Alternate Names	Kinase responsive to stress; Krs2; Mammalian STE20 like protein kinase 1; Mammalian STE20-like protein kinase 1; Mammalian sterile 20 like 1; MST-1; MST1; Serine/threonine kinase 4; Serine/threonine protein kinase Krs 2; Serine/threonine-protein kinase 4; Serine/threonine-protein kinase Krs-2; STE20 like kinase MST1; STE20-like kinase MST1; STK4; STK4_HUMAN; TIIAC; YSK3;

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Description	<p>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. 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 (By similarity). Phosphorylates 'Ser-14' of histone H2B (H2BS14ph) during apoptosis. Phosphorylates FOXO3 upon oxidative stress, which results in its nuclear translocation and cell death initiation. Phosphorylates MOBKL1A, MOBKL1B and RASSF2. Phosphorylates TNNT3 (cardiac Tn-I) and alters its binding affinity to TNNT1 (cardiac Tn-C) and TNNT2 (cardiac Tn-T). Phosphorylates FOXO1 on 'Ser-212' and regulates its activation and stimulates transcription of PMAIP1 in a FOXO1-dependent manner. Phosphorylates SIRT1 and inhibits SIRT1-mediated p53/TP53 deacetylation, thereby promoting p53/TP53 dependent transcription and apoptosis upon DNA damage. Acts as an inhibitor of PKB/AKT1. Phosphorylates AR on 'Ser-650' and suppresses its activity by intersecting with PKB/AKT1 signaling and antagonizing formation of AR-chromatin complexes.</p>
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	56 kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.