

Product datasheet for TP507107

Stk3 (NM_019635) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse serine/threonine kinase 3 (Stk3), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >MR207107 protein sequence
Red=Cloning site **Green**=Tags(s)

MEQPPASKSKLKKLSEDSLTKQPPEEVDVLEKLGEGSYGSVFKAIHKESGQVVAIKQVPVESDLQEIIKE
ISIMQQCDSPYVVKYYGSYFKNTDLWIVMEYCGAGSVSDIIRLRNKLTLEDEIATILKSTLKGLEYLHFM
RKIHRDIKAGNILLNTEGHAKLADFGVAGQLTDTMAKRNTVIGTPFWMAPEVIQEIGYNCVADIWSLGIT
SIEMAEGKPPYADIHPMRAIFMIPTNPPPTFRKPELWSDDFDFVKKCLVKSPEQRATATQLLQHPFIKN
AKPVSILRDLIAEAMEIKAKRHEEQQRELEEEEEENSDEDELDSHTMVKTSSSESVGTMRATSTMSEGAQTM
IEHNSTMLES DLGTMVINSEEEEEEEEEEDGTMKRNATSPQVQRPSFMDYFDKQDFKNKSHENCDQSM
REPGMSNSVFPDNWRVPQDGFDFLKNLSLEELQMRLKALDPMEREIEELHQRYSAKRQPILDAMDAK
KRRQQNF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 56.9 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: [NP_062609](#)



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|---------------|---|
| Locus ID: | 56274 |
| UniProt ID: | Q9J110 |
| RefSeq Size: | 2928 |
| Cytogenetics: | 15 B3.1 |
| RefSeq ORF: | 1494 |
| Synonyms: | 0610042I06Rik; mess1; MST; Mst2; Mst3; Ste20 |
| Summary: | <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. Phosphorylates NKX2-1. Phosphorylates NEK2 and plays a role in centrosome disjunction by regulating the localization of NEK2 to centrosomes, and its ability to phosphorylate CROCC and CEP250. In conjunction with SAV1, activates the transcriptional activity of ESR1 through the modulation of its phosphorylation. Positively regulates RAF1 activation via suppression of the inhibitory phosphorylation of RAF1 on 'Ser-259'. Phosphorylates MOBKL1A and RASSF2. Phosphorylates MOBKL1B on 'Thr-74'. Acts cooperatively with MOBKL1B to activate STK38 (By similarity).[UniProtKB/Swiss-Prot Function]</p> |