

## Product datasheet for **RG210831**

### **MST1 (STK4) (NM\_006282) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MST1 (STK4) (NM_006282) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MST1
Synonyms:	KRS2; MST1; YSK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG210831 representing NM\_006282  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGAGACGGTACAGCTGAGGAACCCGCCGCCGCGCAGCTGAAAAAGTTGGATGAAGATAGTTAAACCA  
 AACCAACCAGAAGAAGTATTTGATGTCTTAGAGAAAAGTTGGAGAAGGGTCCTATGGCAGCGTATACAAAGC  
 TATTCATAAAGAGACCGCCAGATTGTTGCTATTAAGCAAGTTCTGTGGAATCAGACCTCCAGGAGATA  
 ATCAAAGAAATCTCTATAATGCAGCAATGTGACAGCCCTCATGTAGTCAAATATTATGGCAGTTATTTTA  
 AGAACACAGACTTATGGATCGTTATGGAGTACTGTGGGGCTGGTTCTGTATCTGATATCATTTCGATTACG  
 AAATAAACGTTAACAGAAGATGAAATAGCTACAATATTACAATCAACTCTTAAGGGACTTGAATACCTT  
 CATTTTATGAGAAAAATACACCGAGATATCAAGGCAGGAAATATTTTGTAAATACAGAAGGACATGCAA  
 AACTTGCAGATTTGGGGTAGCAGGTCACTTACAGATACCATGGCCAAGCGGAATACAGTGATAGGAAC  
 ACCATTTTGGATGGCTCCAGAAGTGATTCAGGAAATTGGATACAACCTGTGTAGCAGACATCTGGTCCCTG  
 GGAATAACTGCCATAGAAATGGCTGAAGGAAAGCCCTTATGCTGATATCCATCCAATGAGGGCAATCT  
 TCATGATTCCTACAAATCCTCCTCCACATTCCGAAAACAGAGCTATGGTCAGATAACTTTACAGATTT  
 TGTGAAACAGTGTCTTGTAAAGAGCCCTGAGCAGAGGGCCACAGCCACTCAGCTCCTGCAGCACCCATTT  
 GTCAGGAGTGCCAAAGGAGTGTCAATACTGCGAGACTTAATTAATGAAGCCATGGATGTGAAACTGAAAC  
 GCCAGGAATCCCAGCAGCGGGAAGTGGACCAGGACGATGAAGAAAAGTGAAGAGGATGAAATGGATTC  
 TGGCAGATGGTTCGAGCAGTGGGTGATGAGATGGGCACTGTCCGAGTAGCCAGCACCATGACTGATGGA  
 GCCAATACTATGATTGAGCAGATGACACGTTGCCATCACAACCTGGCACCATGGTGATCAATGCAGAGG  
 ATGAGGAAGAGGAAGAACTATGAAAAGAAAGGATGAGACCATGCAGCCTGCGAAAACCATCTTTCTTGA  
 ATATTTTGAACAAAAGAAAAGGAAAACAGATCAACAGCTTTGGCAAGAGTGTACCTGGTCCACTGAAA  
 AATTCTTCAGATTGAAAATACACAGGATGGAGACTACGAGTTTCTTAAGAGTTGGACAGTGGAGGACC  
 TTCAGAAGAGGCTCTTGGCCCTGGACCCATGATGGAGCAGGAGATTGAAGAGATCCGGCAGAAGTACCA  
 GTCCAAGCGCCAGCCATCCTGGATGCCATAGAGGCTAAGAAGAGACGGCAACAAAACCTT

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG210831 representing NM\_006282  
 Red=Cloning site Green=Tags(s)

METVQLRNPPRRQLKKLDEDSLTKQPEEVFDVLEKLGEGSYGSVYKAIHKETGQIVAIKQVPVESDLQEI  
 IKEISIMQQCDSPHVVKYYGSYFNKNTDLWIVMEYCGAGSVSDIIRLRNKTLEDEIATILQSTLKGLEYL  
 HFMRKIHRDIKAGNILLNTEGHAKLADFGVAGQLTDTMAKRNTVIGTPFWMAPEVIQEIYNCVADIWSL  
 GITAIEMAEGKPPYADIHPMRAIFMIPTNPPPTFRKPELWSDNFDFVKQCLVKSPEQRATATQLLQHPF  
 VRSAGVSIIRDLINEAMDVCLKRQESQREVDQDDEENSEEDEMDSGTMVRAVGDEMGTVRVASTMTDG  
 ANTMIEHDDTLPSQLGTMVINADEEEEGTMKRREDETMQPAKPSFLEYFEQKEKENQINSFGKSVPGPLK  
 NSSDWKIPQDGDYEFKLSWTVEDLQKRLALDPMMEQIEIEIRQYQSKRQPILDAIEAKRRRQNF

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_006282

**ORF Size:** 1461 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_006282.5](#)

**RefSeq Size:** 6344 bp

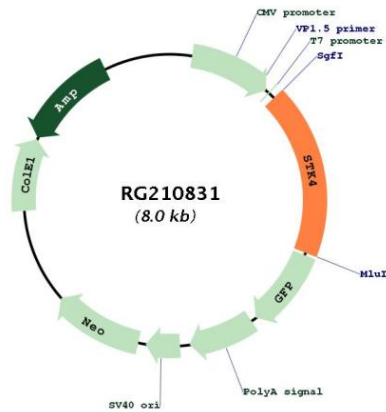
**RefSeq ORF:** 1464 bp

**Locus ID:** 6789

**UniProt ID:** [Q13043](#)

**Cytogenetics:** 20q13.12  
**Domains:** pkinase, TyrKc, S\_TKc  
**Protein Families:** Druggable Genome, Protein Kinase  
**Protein Pathways:** MAPK signaling pathway, Non-small cell lung cancer, Pathways in cancer  
**Gene Summary:** The protein encoded by this gene is a cytoplasmic kinase that is structurally similar to the yeast Ste20p kinase, which acts upstream of the stress-induced mitogen-activated protein kinase cascade. The encoded protein can phosphorylate myelin basic protein and undergoes autophosphorylation. A caspase-cleaved fragment of the encoded protein has been shown to be capable of phosphorylating histone H2B. The particular phosphorylation catalyzed by this protein has been correlated with apoptosis, and it's possible that this protein induces the chromatin condensation observed in this process. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG210831