Certificate of Analysis

REACTION BIOLOGY

ProQinase™ TSSK3

testis specific serine kinase 3

Recombinant Human Active Protein Kinase

HGNC Symbol: TSSK3

Synonyms: STK22C, SPOGA3

Product No.: 2060-0000-1

Lot: 004

Description: Human TSSK3, full length, amino acids M_1-T_{268} (as in NCBI/Protein entry NP_443073.1), untagged, expressed in Sf9 insect cells

Product identity: TSSK3 Lot 004, has been verified by mass spectrometry LC-ESI-MS/MS

Theoretical $MW_{Fusion\ Protein}$: 30256 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

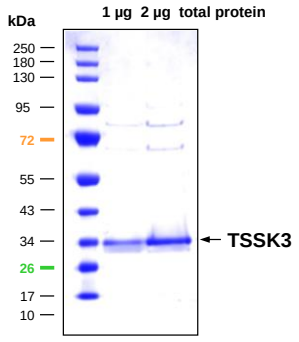
Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 20 % glycerol

Storage temperature: -80°C
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

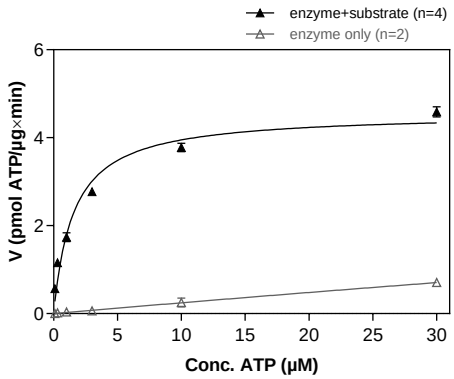
Protein concentration: 0.091 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:
Specific kinase activity (P_i transfer): 4.6 pmol/µg*min
ATP-K_M: 1.5 µM

TSSK3 Lot 004:
Coomassie stain



TSSK3 Lot 004:
Determination of V_{max} and K_M value for ATP



- Assay conditions:
  60 mM HEPES-NaOH, pH 7.5
  3 mM $MgCl_2$
  3 mM $MnCl_2$
  3 µM Na-orthovanadate
  1.2 mM DTT
  50 µg/ml $PEG_{20.000}$
  ATP (variable)
  Substrate: 4xChocktide 10 µg/ml
  Kinase: 6 µg/ml

Assay technology:
Radiometric filter binding assay
MSFC membrane (96 well plate, Millipore)

Recombinant Proteins

Sequence information

GST-TSSK3 Recombinant Fusion Protein Amino Acid Sequence

1	GP**MEDFLLSN GYQLGKTIGE GTYSKVKEAF SKKHQRKVAI KVIDKMGGPE EFIQRFLPRE**	60
61	**LQIVRTLDHK NIIQVYEMLE SADGKICLVM ELAEGGDVFD CVLNGGPLPE SRAKALFRQM**	120
121	**VEAIRYCHGC GVAHRDLKCE NALLQGFNLK LTDFGFAKVL PKSHRELSQT FCGSTAYAAP**	180
181	**EVLQGIPHDS KKGDVWSMGV VLYVMLCASL PFDDTDIPKM LWQQQKGVSF PTHLSISADC**	240
241	**QDLLKRLLEP DMILRPSIEE VSWHPWLAST**	300

1-2: legacy of 3C protease cleavage **Red**: HIS6-tag **blue**: TSSK3

TSSK3 wt[1] Amino Acid Sequence

1	**MEDFLLSNGY QLGKTIGEGT YSKVKEAFSK KHQRKVAIKV IDKMGGPEEF IQRFLPRELQ**	60
61	**IVRTLDHKNI IQVYEMLESA DGKICLVMEL AEGGDVFDCV LNGGPLPESR AKALFRQMVE**	120
121	**AIRYCHGCGV AHRDLKCENA LLQGFNLKLT DFGFAKVLPK SHRELSQTFC GSTAYAAPEV**	180
181	**LQGIPHDSKK GDVWSMGVVL YVMLCASLPF DDTDIPKMLW QQQKGVSFPT HLSISADCQD**	240
241	**LLKRLLEPDM ILRPSIEEVS WHPWLAST**	300

blue: TSSK3 sequence expressed in recombinant protein

[1]NCBI/Protein accession number NP_443073.1

Recombinant Proteins