Certificate of Analysis

REACTION BIOLOGY

ProQinase™ TAOK3 (TAO kinase 3)

Recombinant Human Active Protein Kinase

Synonyms: DPK, JIK, KDS, MAP3K18, hKFC-A

Product No.: 0908-0000-1

Lot: 005

Description: Human TAOK3, full length, amino acids M_1-R_{898} (as in GenBank entry NM_016281.2)*, untagged, expressed in Sf9 insect cells

*Sequence may contain documented polymorphisms Detailed aa-sequence on request

Product identity: TAOK3 Lot 005 was confirmed as TAOK3 by mass spectroscopy LC-ESI-MS/MS

Theoretical $MW_{Protein}$: 106,015 Da

Expression: Baculovirus infected Sf9 cells

Purification: GST-Affinity Chromatography

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

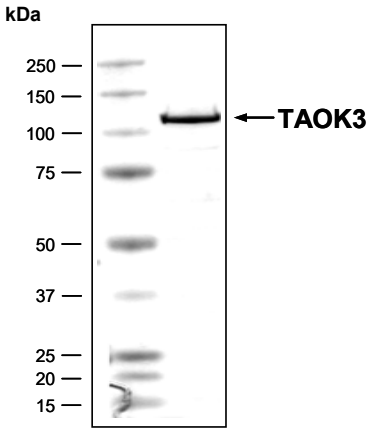
Storage temperature: -80°C
Avoid repeated freeze-thaw cycles!

Protein concentration: 0.124 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Determination of K_m value & Specific activity:
- 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: PKC-derived peptide (LRRLSLGLRRLSLGLRRLSLG-RFARKGSLRQKNV), 2.5 µg / ml
  TAOK3: 2.0 µg / ml
- Filter binding assay
  MSPH membrane (Millipore)

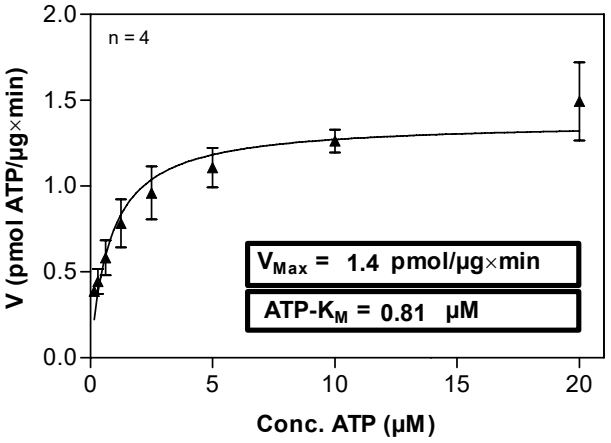
Specific activity: 1 pmol/µg×min

Coomassie stain:



2.0 µg TAOK3

Determination of K_m value for ATP:



Recombinant Proteins