



#7571

CDK7/CycH/MAT1

trimeric complex

Product No.: 0366-0360-4

Description: Triple expression of human CDK7, amino acids M₁-F₃₄₆ (as in GenBank entry NM_001799)*, N-terminally fused to GST-HIS₆-Thrombin cleavage site and human CycH, amino acids M₁-L₃₂₃ (as in GenBank entry NM_001239)*, and human MAT1, amino acids M₁-S₃₀₉ (as in GenBank entry NM_002431)*, both N-terminally fused to HIS₆-Thrombin cleavage site

*Sequence may contain documented polymorphisms
Detailed sequence on request

Product identity: CDK7/CycH/MAT1, Lot 001, was confirmed as CDK7/CycH/MAT1 by specific Western Blotting using anti CDK7, CycH and MAT1 antibodies

Theoretical MW_{GST-CDK7}: 68,934 Da

Theoretical MW_{CycH}: 42,400 Da

Theoretical MW_{MAT1}: 40,579 Da

Expression: Baculovirus infected Sf9 cells

Purification: One-step affinity purification using GSH-agarose

Storage buffer: 50 mM Tris-HCl, pH 8.0; 100 mM NaCl, 5 mM DTT, 4 mM reduced glutathione, 20% glycerol

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

Protein concentration: 0.108 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Method for determination of K_m value &

Specific activity:

• **Assay conditions:**

60 mM HEPES-NaOH, pH 7.5

3 mM MgCl₂

3 mM MnCl₂

3 µM Na-orthovanadate

1.2 mM DTT

2.5 µg / 50 µl PEG_{20,000}

ATP (variable)

Substrate: Rb-CTF, 5 µg / 50 µl

Recombinant CDK7/CycH/MAT1: 100 ng / 50 µl

• Filter binding assay MAFC membrane (Millipore)

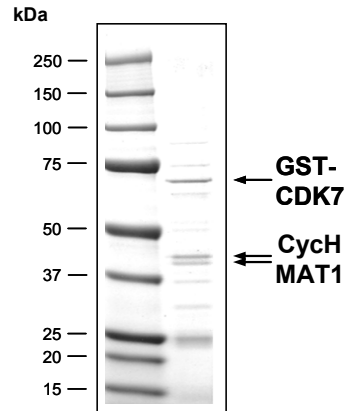
Specific activity: 9 pmol/µg×min

This enzyme was purified and extensively validated in a radioactive filter binding assay by a collaborator of Cell Signaling Technology. Cell Signaling Technology is in the process of revalidating this reagent in house using several technologies relevant to the screening community including antibody based detection methods.

Please contact us at drugdiscovery@cellsignal.com for details.

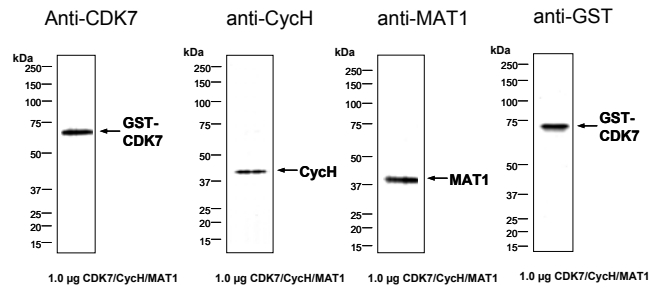
This product is for *in vitro* research use only and is not intended for use in humans or animals.

Coomassie stain:



2.0 µg CDK7/CycH/MAT1

Western blot analysis:



Determination of K_m value for ATP:

