

MET (Rat), Active

Recombinant protein expressed in Sf9 cells

Cat# CY-SPM52

Lot No. K283-2
5 µg 0.1 µg/µl

Background:

MET is a proto-oncogene that encodes a transmembrane growth factor receptor which is a heterodimer of two disulphide linked chains of 50 kDa (alpha) and 145 kDa (beta). MET is widely expressed in the kidney, brain, lung, skin, and embryonic tissue (1). Hepatocyte growth factor (HGF) binds to MET and activates its tyrosine kinase activity. MET is overexpressed and activated in a variety of human cancers including pancreatic, colon, gastric, cervical and ovarian cancers and has been shown to be involved in tumor cell migration and invasion (2).

Product Description:

Recombinant rat MET (958-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is X96786.

Gene Aliases:

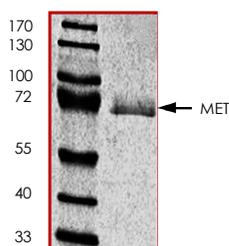
HGFR

Formulation:

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol.

Purity & Molecular Weight:

The purity was determined to be >90% by densitometry. Approx. MW 74kDa.



Storage:

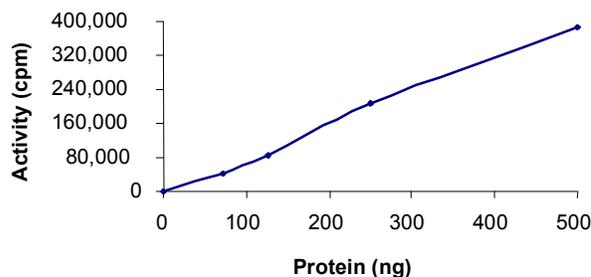
Store product at -70°C . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

Stability:

1 year at -70°C from date of shipment.

**Specific Activity:**

The specific activity was determined to be 46 nmol /min/mg as per Activity Assay Protocol.

**Activity Assay Protocol:**

Assay activity of the kinase in a 25 μ L reaction consisting of 5 μ L of 5 X Kinase Assay Buffer, 10 μ L of 1 mg/ml the Substrate Solution, 5 μ L of diluted kinase and 5 μ L of 250 μ M ATP solution containing [γ - 32 P] ATP (0.167 μ Ci/ μ L). Start the reaction by adding the ATP solution. Incubate for 15 minutes at 30°C. Terminate the reaction by spotting 20 μ L of the reaction mixture onto phosphocellulose P81 paper. Air-dry the P81 paper and sequentially wash 4 times for approximately 10 minutes each in 1% phosphoric acid with constant gentle stirring. Count the P81 paper in a liquid scintillation counter.

Substrate Solution:

Poly (Glu:Tyr, 4:1) synthetic peptide substrate diluted in distilled H₂O to a final concentration of 1 mg/ml.

5 X Kinase Assay Buffer:

25mM MOPS, pH 7.2, 12.5mM β -glycerol-phosphate, 20mM MgCl₂, 25mM MnCl₂, 5mM EGTA, 2mM EDTA. Add 0.25mM DTT to Kinase Assay Buffer prior to use.

References:

- 1.Giordano, S. et al: Biosynthesis of the protein encoded by the c-met proto-oncogene. Oncogene. 1989 Nov;4(11):1383-8.
- 2.Iyer, A. et al: Structure, tissue-specific expression, and transforming activity of the mouse met protooncogene. Cell Growth Differ. 1990 Feb;1(2):87-95.

CycLex Co., Ltd

1063-103 Tera-Sawaoka, Ina, Nagano, Japan 396-0002

Fax: 81-265-76-7618

e-mail: info@cyclex.co.jp

URL: <http://www.cyclex.co.jp>