Human TPL2 / MAP3K8 / MEKK8 Protein (GST Tag)

Catalog Number: **10800-H09B**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

AURA2; c-COT; COT; EST; ESTF; MEKK8; Tpl-2; TPL2

Protein Construction:

A DNA sequence encoding the human MAP3K8 isoform 1 (P41279-1) (Met 30-Arg 397) was fused with the GST tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 91 % as determined by SDS-PAGE

Bio Activity:

Kinase activity untested

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human MAP3K8/GST chimera consists of 592 amino acids and has a predicted molecular mass of 68 kDa as estimated in SDS-PAGE under reducing conditions.

Formulation:

Supplied as sterile 50mM Tris, 100mM NaCl, 0.5mM PMSF, 0.5mM GSH, pH 8.0

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

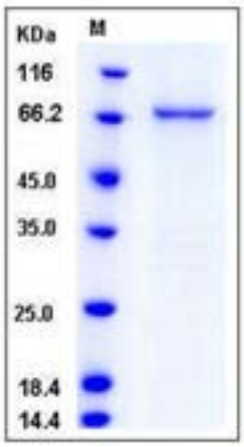
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Mitogen-activated protein kinase kinase kinase 8, also known as Cancer Osaka thyroid oncogene, Proto-oncogene c-Cot, Serine/threonine-protein kinase cot, Tumor progression locus 2 and MAP3K8, is a cytoplasm protein which belongs to theprotein kinase superfamily, STE Ser/Thr protein kinase family and MAP kinase kinase kinase subfamily. MAP3K8 is expressed in several normal tissues and human tumor-derived cell lines. Isoform1of MAP3K8 is activated specifically during the S and G2/M phases of the cell cycle. MAP3K8 is required for TLR4 activation of the MEK/ERK pathway. It is able to activate NF-kappa-B 1 by stimulating proteasome-mediated proteolysis of NF-kappa-B 1/p105. MAP3K8 plays a role in the cell cycle. The longer form has some transforming activity, although it is much weaker than the activated cot oncoprotein. MAP3K8 oncogene linked to human endometrial carcinoma suggesting that it may be another molecule involved in human endometrial cancer. MAP3K8 may also be an important mediator of intracellular mechanotransduction in human bone marrow-derived mesenchymal stem cells (MSCs).

References

1.Clark,A.M. et al., 2004, Genes Chromosomes Cancer. 41 (2):99-108.
2.Chan,H. et al., 2005, Biochem Biophys Res Commun. 328 (1):198-205.
3.Aparecida Alves,C. et al., 2006, Eur J Gynaecol Oncol. 27 (6):589-93.