

## Recombinant Human TPL2/MAP3K8/MEKK8 Protein (GST Tag)

Catalog No. PKSH030380

*Note:* Centrifuge before opening to ensure complete recovery of vial contents.

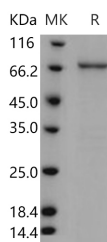
### Description

<b>Synonyms</b>	AURA2;c-COT;COT;EST;ESTF;MEKK8;Tpl-2;TPL2
<b>Species</b>	Human
<b>Expression Host</b>	Baculovirus-Insect Cells
<b>Sequence</b>	Met 30-Arg 397
<b>Accession</b>	P41279-1
<b>Calculated Molecular Weight</b>	68.0 kDa
<b>Observed molecular weight</b>	68 kDa
<b>Tag</b>	N-GST
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 91 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
<b>Formulation</b>	Supplied as sterile solution of 50mM Tris, 100mM NaCl, 0.5mM PMSF, 0.5mM GSH, pH 8.0
<b>Reconstitution</b>	Not Applicable

### Data



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### Background

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 the protein 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. Isoform 1 of 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

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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).