## AssayGenie

## Product Data:

Product SKU: RPES1456
Species: Human

Size: $20 \mu \mathrm{~g}$
Expression host: Baculovirus-Insect Cells

Uniprot: P41279

Protein Information:
Molecular Mass: 68 kDa
AP Molecular Mass: 68 kDa
Tag: N-GST
Bio-activity:
Purity: $\quad>91 \%$ as determined by reducing SDS-PAGE.
Endotoxin: $\quad<1.0 \mathrm{EU}$ per $\mu \mathrm{g}$ as determined by the LAL method.
Storage: $\quad$ Store at $<-20^{\circ} \mathrm{C}$, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping: $\quad$ This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20 ${ }^{\circ} \mathrm{C}$.

Formulation: $\quad$ Supplied as sterile 50 mM Tris, $100 \mathrm{mM} \mathrm{NaCl}, 0.5 \mathrm{mM}$ PMSF, 0.5 mM GSH, pH 8.0
Reconstitution: Please refer to the printed manual for detailed information.
Application:
Synonyms: AURA2;c-COT;COT;EST;ESTF;MEKK8;Tpl-2;TPL2

Immunogen Information:
Sequence: Met 30-Arg 397

## Background:

Mitogen-activated protein kinase kinase kinase 8, also known as Cancer Osaka thyroid oncogene, Protooncogene 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 tumorderived 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 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).

