Recombinant Protein Technical Manual

Recombinant Human STK40 Protein (His & GST Tag)

RPES1180

Product Data:

Product SKU: RPES1180

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_114406

Protein Information:

Molecular Mass:	76.8 kDa
AP Molecular Mass:	85 kDa
Tag:	N-His & GST
Bio-activity:	
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	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.
Formulation:	Supplied as sterile 20mM Tris, 500mM NaCl, 10% glycerol, 3mM DTT, 0.5M Urea, 0.5mM GSH, pH 8.0
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	SgK495;SHIK

Immunogen Information:

Sequence: Met 1-Lys 435

Background:

STK40 localized to both the cytoplasm and the nucleus. It is ubiquitously expressed. Mechanistically, Stk40 interacts with Rcn2, which also activates Erk1/2 to induce ExEn specification in mouse ESCs. Stk40 is able to activate the Erk/MAPK pathway and induce extraembryonic-endoderm (ExEn) differentiation in mouse ESCs. Interestingly, cells overexpressing Stk40 exclusively contribute to the ExEn layer of chimeric embryos when injected into host blastocysts. In contrast, deletion of Stk40 in ESCs markedly reduces ExEn differentiation in vitro. STK40 has a central serine/threonine protein kinase domain and is homologous to TRB-3, a protein that regulates activation of MAP kinases and inhibits NFκB-mediated gene transcription. Similarly, overexpression of STK40 inhibits NFκB activation triggered by TNF and also inhibits p53-mediated transcription. There are four named isoforms of STK40 that are produced as a result of alternative splicing.