

## Product Data Sheet

## TNIK Protein, Human (Sf9, His)

Cat. No.:	HY-P701645
Synonyms:	TNIK; TRAF2 and NCK-interacting protein kinase
Species:	Human
Source:	Sf9 insect cells
Accession:	Q9UKE5 (D11-G314)
Gene ID:	23043
Molecular Weight:	

PROPERTIES	
Appearance	Solution.
Formulation	Supplied as a 0.22 $\mu m$ filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION	
Background	TNIK, a serine/threonine kinase, emerges as a pivotal activator of the Wnt signaling pathway, playing a crucial role in gene expression regulation. Its involvement extends to the phosphorylation of TCF4/TCF7L2 at promoters of Wnt target genes, thereby facilitating their activation. Positioned upstream of the JUN N-terminal pathway, TNIK contributes to the intricate cascade of Wnt signaling. Beyond its canonical functions, TNIK is implicated in the response to environmental stress and forms part of a signaling complex, comprising NEDD4, RAP2A, and TNIK, which orchestrates neuronal dendrite extension and arborization during development. In a broader context, TNIK exhibits potential roles in cytoskeletal rearrangements and the regulation of cell spreading. Notably, it exerts its influence by phosphorylating SMAD1 at Thr-322, thereby expanding its regulatory repertoire in diverse cellular processes.

## Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA