

TOLLIP Protein, Human (His)

Cat. No.:	HY-P71373
Synonyms:	Toll-Interacting Protein; TOLLIP
Species:	Human
Source:	E. coli
Accession:	Q9H0E2 (A2-P274)
Gene ID:	54472
Molecular Weight:	Approximately 31.0 kDa

PROPERTIES

AA Sequence	<pre> ATTVSTQRGP VYIGELPQDF LRITPTQQQR QVQLDAQAAQ QLQYGGAVGT VGRLNITVVQ AKLAKNYGMT RMDPYCRLRL GYAVYETPTA HNGAKNPRWN KVIHCTVPPG VDSFYLEIFD ERAFSMDDDRI AWTHITIPES LRQGKVEDKW YSLSGRQGDD KEGMINLVMS YALLPAAMVM PPQPVVLMPT VYQQGVGYVP ITGMPAVCSP GMVPVALPPA AVNAQPRCSE EDLKAIQDMF PNMDQEVIRS VLEAQRGNKD AAINSL LQMG EEP </pre>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of 4 mM HCl.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	TOLLIP, a key component of the signaling pathway for IL-1 and Toll-like receptors, exerts regulatory functions in cell activation by microbial products. It acts by recruiting IRAK1 to the IL-1 receptor complex, subsequently inhibiting IRAK1 phosphorylation and kinase activity. Additionally, TOLLIP plays a crucial role in connecting the ubiquitin pathway to autophagy, functioning as a ubiquitin-ATG8 family adapter and facilitating the autophagic clearance of ubiquitin conjugates. The selective autophagy pathway, dependent on TOLLIP, is particularly noteworthy for its involvement in the
------------	---

clearance of cytotoxic polyQ proteins aggregates. Furthermore, TOLLIP forms a complex with TOM1, facilitating the recruitment of ubiquitin-conjugated proteins onto early endosomes. It interacts with various proteins, including TLR2, the TLR4-MD2 complex, and ATG8 family proteins, highlighting its diverse roles in cellular processes. Additionally, TOLLIP interacts with phosphatidylinositol 3-phosphate (PtdIns(3)P) and oligomerizes, contributing to its multifaceted functionality in cellular homeostasis.

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