

## Product Data Sheet

## OTUD5 Protein, Human (His, FLAG)

Cat. No.:	HY-P701483
Synonyms:	OTUD5; OTU domain-containing protein 5; Deubiquitinating enzyme A; DUBA
Species:	Human
Source:	E. coli
Accession:	Q96G74 (G172-G351)
Gene ID:	55593
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/ $\mu$ g, 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** OTUD5 Protein, a deubiquitinating enzyme, plays a crucial role as a negative regulator of the innate immune system, exhibiting peptidase activity towards 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains, and the ability to cleave 'Lys-11'-linked ubiquitin chains in vitro. It exerts its influence through TRAF3 deubiquitination, subsequently suppressing type I interferon (IFN) production. Additionally, OTUD5 serves as a key controller of neuroectodermal differentiation, counteracting the degradation of essential chromatin regulators like ARID1A, HDAC2, and HCF1 by cleaving 'Lys-48'-linked ubiquitin chains. Furthermore, following phosphorylation by MTOR, OTUD5 acts as a positive regulator of mTORC1 and mTORC2 signaling, mediating the deubiquitination of BTRC and enhancing its stability. This multifaceted role underscores the significance of OTUD5 in modulating diverse cellular processes, highlighting its pivotal contributions to immune regulation, cellular differentiation, and signaling pathways.

## 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