

Recombinant Human OTUB1 / OTB1 Protein (His tag)

Cat.NO.: TP04976

3th Edition

Synonyms:HSPC263;OTB1;OTU1

Description:Ubiquitin thioesterase OTUB1, also known as Deubiquitinating enzyme OTUB1, OTU domaincontaining ubiquitin aldehyde-binding protein 1, Otubain-1, Ubiquitin-specific-processing protease OTUB1, OTUB1 and OTB1, is a cytoplasm protein which belongs to the peptidase C65 family. OTUB1 is a hydrolase that can remove conjugated ubiquitin from proteins and plays an important regulatory role at the level of protein turnover by preventing degradation. OTUB1 is a regulator of T-cell anergy, a phenomenon that occurs when T-cells are rendered unresponsive to antigen rechallenge and no longer respond to their cognate antigen. OTUB1 acts via its interaction with RNF128 / GRAIL, a crucial inductor of CD4 T-cell anergy. Isoform 1 of OTUB1 destabilizes RNF128, leading to prevent anergy. In contrast, isoform 2 of OTUB1 stabilizes RNF128 and promotes anergy. OTUB1 regulates RNF128-mediated ubiquitination, but does not deubiquitinate polyubiquitinated RNF128. Deubiquitinates estrogen receptor alpha (ESR1). OTUB1 mediates deubiquitination of 'Lys-48'-linked polyubiquitin chains, but not 'Lys-63'-linked polyubiquitin chains. OTUB1 is also capable of removing NEDD8 from NEDD8 conjugates, but with a much lower preference compared to 'Lys-48'-linked ubiquitin.

Form:PBS

Molecular Weight: 32.8 kDa

Sequences: Met 1-Lys 271

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.