Otub1 (Otubain 1)

Cat. # DB201

Background

OTUB1, or Otubain-1, is a deubiquitinating enzyme that plays a crucial role in regulating protein ubiquitination and degradation within cells. It is known for its specificity in cleaving ubiquitin chains from substrates, particularly K48-linked polyubiquitin chains, which typically target proteins for proteasomal degradation. By removing these ubiquitin chains, OTUB1 can stabilize its target proteins and prevent their degradation. OTUB1 is involved in various cellular processes, including DNA repair, immune responses, and cell cycle regulation.

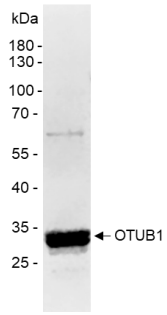
Alternate Names

Deubiquitinating enzyme OTUB1, FLJ20113, FLJ40710, HSPC263, MGC111158, OTB1, OTU1, Otubain 1, OTU domain-containing ubiquitin aldehyde-binding protein 1, Ubiquitin-specific-processing protease OTUB1, Ubiquitin thioesterase protein OTUB1

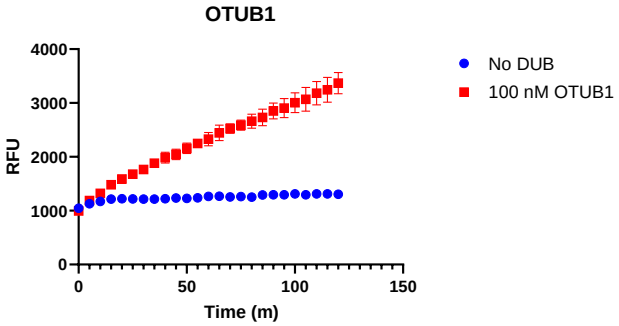
Product Information:

Purity	≥ 95% by SDS-PAGE
Molecular Weight	32 kDa
Quantity	25µg
Physical State	Liquid
Source	Human Recombinant
Tag	His6
Activity	This enzyme cleaves K48- and K63- linked ubiquitin chains *in vitro*
Storage	-80ºC. Avoid repeated freeze-thaw cycles

Product QC



SDS-Page Analysis of purified OTUB1. Two µg of the enzyme was loaded on a 10-20% SDS-PAGE gel and stained with Coomassie brilliant blue.



Activity Assay of OTUB1. 100 nM OTUB1 was tested in a Ub-Rh110 assay showing robust DUB activity.

References

1. Wiener, R., et al., Nature, 2012. 483(7391):618-22.

2. Zhu, D. et al., Cell Death Differ., 2021. 28(6):1773-1789.