Product Name: OTUB1*

Alternate Names: OTB1, OTU1

NOTE: The “star” suffix denotes fusion to UBE2D1(C85A), an inert isoform of the ubiquitin-conjugating enzyme UBC H5a.

Product Code: TDE-062

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

Recombinant human OTUB1* is a deubiquitylase fusion-enzyme that is highly specific for K48-linked polyubiquitin. Appropriate enzyme concentrations are specific to the application.

Physical Characteristics

Species: Human

Predicted MW (kDa): 47 kDa

Source: *E. coli* BL21(DE3) A.I.

Purity: 95 %

Tag: N/A

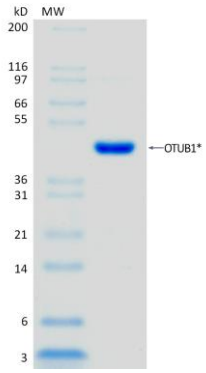
Formulation: 40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 1 mM TCEP, pH 7.6

Shipping: The product is shipped with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Stability/Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -70°C (stable for 24 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE



2 µg OTUB1* run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Protein ID: Ubiquitin thioesterase OTUB1

Activity Assay

Verified in K48-linked Di-Ubiquitin Hydrolysis Assay.

Background

Description

Ubiquitin thioesterase OTUB1* is an engineered OTU-family deubiquitylase (DUB) in which the human OTUB1 catalytic core is fused in *cis* to a catalytically dead UBE2D2 (C85A) module, locking the enzyme in its high specific activity state. OTUB1* is highly selective for K48-linked polyubiquitin chains and is therefore a versatile reagent for UbiCrest analysis and other K48-restricted DUB assays.

Accession Number: Q96FW1

Entrez Gene ID: OTUB1

Protein Sequence

GPGSMALKRIHKELNDLARDPPAQCSAGPVGDDMFHWQATIMGPNDSPYQGGVFFLTIHFPTD
YPFKPPKVAFTTRIYHPNINSNGSIALDILRSQWSPALTISKVLLSICSLLCDPNPDDPLVPE
IARIYKTDREKYNRIAREWTQKYAMGGSSGGSSGGSDSEGVNCLAYDEAIMAQQDRIQQEIAV
QNPLVSERLELSVLYKEYAEDDNIYQQKIKDLHKKYSYIRKTRPDGNCFYRAFGFSHLEALLD
DSKELQRFKAVSAKSKEDLVSQGFTEFTIEDFHNTFMDLIEQVEKQTSVADLLASFNDQSTSD
YLVVYLRLLTSGYLQRESKFFEHFIEGGRTVKEFCQQEVEPMCKESDHIHIIALAQALSVSIQ
VEYMDRGEGGTTNPHIFPEGSEPKVYLLYRPGHYDILYK