

Product Name: K48-linked Tetra-ubiquitin

Alternate Names: Human Lys48-linked tetra-ubiquitin (Ub₄-K48, K48-tetraUb)

Product Code: TUB-057

Quantity: 25 µg

FOR RESEARCE USE ONLY (RUO)

Storage:

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store \leq -20°C (stable for 48 months from date of receipt).

Verified Applications / Usage

Poly-ubiquitin chains exhibit diversity in length, linkage type, and associated cellular functions. K48-linked tetra-ubiquitin serves as a valuable reagent in assays involving ubiquitin-binding proteins and as a substrate for ubiquitin-specific deubiquitylating enzymes (DUBs). Optimal enzyme concentrations should be empirically determined based on the specific assay context. Note: Exposure of this product to elevated temperatures in SDS-PAGE sample buffer may lead to anomalous high-molecular-weight smearing during electrophoresis, which does not reflect its actual purity. For improved resolution, we recommend pre-incubation in SDS-PAGE buffer at temperatures below 60 °C for 20 minutes prior to gel loading.

Physical Characteristics

Species: Homo sapiens (Human)

Predicted MW (kDa): 34

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

Purity: 95%

Concentration: 29 µM

Formulation: 10 mM HEPES, pH 7.6

Shipping: The product is shipped with dry ice or equivalent. 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 \leq -20°C (stable for 48 months from date of receipt).





Quality Assurance

Purity & SDS-PAGE

Protein ID: Ubiquitin

kD	MW	
200		
116 97.4		
66.3		
55.4		
36.5 31		🛶 Tetra-Ubiquitin, K48
	_	
21.5		
14.4		
6		
3.5	-	

2 µg UBA1 run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Activity Assay

Fully hydrolyzed by the K48-specific OTUB1* deubiquitylase



Background

Description

Lys48-linked ubiquitin tetramer linked between glycine 76 of one ubiquitin and lysine 48 of the following ubiquitin

Accession Number: Ub

Entrez Gene ID: UBB



Protein Sequence

MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLE DGRTLSDYNIQKESTLHLVLRLRGG