Product Name: K29-linked Di-Ubiquitin

Product Code: TUB-052

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

Ubiquitin chains exhibit diversity in length, linkage type, and associated cellular functions. K29-linked Di-Ubiquitin serves as a valuable reagent in assays involving ubiquitin-binding proteins and as a substrate for ubiquitin-specific deubiquitylating enzymes (DUBs).

Physical Characteristics

Species: Human

Predicted MW (kDa): 17 kDa

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

Purity: 95 %

Tag: Untagged

Formulation: 10 mM HEPES, pH 7.6

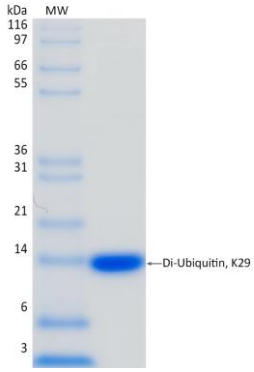
Shipping: The product is shipped with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Stability/Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -20°C (stable for 24 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE

Protein ID: Ubiquitin



2 µg K29-linked Di-Ubiquitin run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Activity Assay

Polyubiquitin chains can serve as substrates in *in vitro* reactions with deubiquitylating enzymes (DUBs) that hydrolyze bonds between adjacent ubiquitin molecules. Furthermore, polyubiquitin chains can be utilized to explore the mechanisms of binding and recognition between these chains and other proteins with UIMs, UBAs, and/or other ubiquitin-binding motifs.

Background

Description

Enzymatically generated ubiquitin dimer linked between glycine 76 of one ubiquitin and lysine 29 of the following ubiquitin.

Protein Sequence

MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDY
NIQKESTLHLVLRLRGG