

Product Name: Ubiquitin, AF647-Conjugated

Product Code: TUB-122

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

AF647-conjugated MGCGS-ubiquitin enables real-time fluorescence monitoring of *in vitro* ubiquitin activation, transfer, and conjugation through E1, E2, and E3 enzyme cascades. Its far-red, photostable fluorophore also supports sensitive deubiquitylase assays for quantitative analysis of ubiquitin pathway dynamics.

Physical Characteristics

Species: Human

Predicted MW (kDa): 9.9 kDa

Source: *E. coli* BL21

Purity: 95 %

Tag: Untagged

Formulation: 20 mM HEPES, pH 7.6, 100 mM NaCl

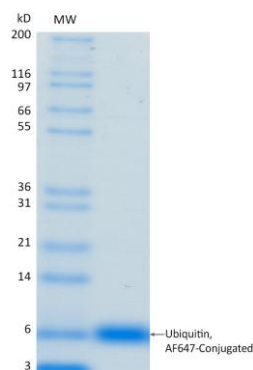
Shipping: The product is shipped with cold packs or dry ice. Upon receipt, store it immediately at the temperature recommended below.

Stability/Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -70 °C (stable for 48 months from date of receipt). This product is light sensitive and should be protected from prolonged light exposure.

Quality Assurance

Purity & SDS-PAGE

Protein ID: Ubiquitin



2 µg Ubiquitin, AF647-Conjugated run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Activity Assay

Verified in Ubiquitin Charging Assay.

Background

Description

This AF647-labeled MGCGS-ubiquitin features a single, site-specific conjugation at an engineered N-terminal cysteine, maintaining native ubiquitin activity while enabling sensitive far-red fluorescence detection (Ex 650 nm / Em 665 nm). It is optimized for real-time studies of ubiquitin ligation and DUB activity, offering high signal-to-background and photostability for quantitative assays.

Protein Sequence

MG (C*AF647) GSMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQL
 EDGRTLSDYNIQKESTLHLVLRRLGG