

Product Name: Ubiquitin, AF488-Conjugated

Product Code: TUB-120

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

AF488-conjugated MGCGS-ubiquitin enables real-time fluorescence monitoring of *in vitro* ubiquitin activation, transfer, and conjugation through E1, E2, and E3 enzyme cascades. This bright, 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

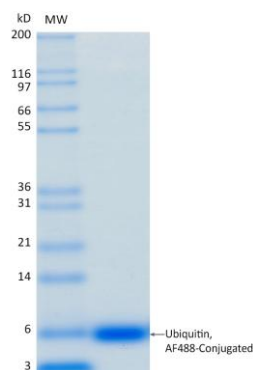
Shipping: The product is shipped with cold packs or dry ice. Upon receipt, store it immediately at the temperature recommended below.

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, AF488-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 AF488-labeled MGCGS-ubiquitin features site-specific conjugation at an engineered N-terminal cysteine, preserving ubiquitin activity while enabling high-sensitivity green fluorescence detection (Ex 495 nm / Em 519 nm). It is optimized for quantitative *in vitro* assays of ubiquitylation and deubiquitylase activity.

Protein Sequence

MG (C*AF488) GSMQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLLGG