

**Product Name:** TUBE (UBQLN1)

**Alternate Names:** TUBE2

**Product Code:** TAM-060

**FOR RESEARCH USE ONLY (RUO)**

**Verified Applications / Usage**

Recovers K48-linked polyubiquitin using anti-His magnetic beads

**Physical Characteristics**

**Species:** Human

**Predicted MW (kDa):** 21 kDa

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

**Purity:** 95 %

**Tag:** N-His<sub>6</sub>-3C

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

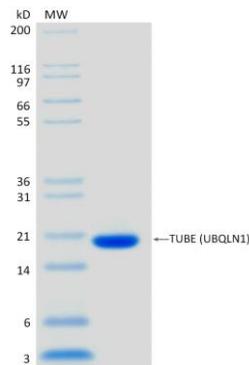
**Shipping:** The product is shipped with dry ice. Upon receipt, store it immediately at the temperature recommended below.

**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

Protein ID: Ubiquilin-1



2 µg TUBE(UBQLN1) run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

### Activity Assay

Verified in Polyubiquitin Pull-Down Assay.

## Background

### Description

TUBE (UBQLN1) is a synthetic “molecular trap” built by stringing four ubiquitin-associated (UBA) domains from human ubiquilin-1 into a single polypeptide. This tandem architecture boosts affinity for polyubiquitin chains by roughly 1000-fold ( $K_d \approx 1-10$  nM) compared with a lone UBA. TUBEs enable pull-down of polyubiquitylated substrates under native conditions, protection of labile ubiquitin signals during lysis, and when tagged with dyes, they may be used in polyubiquitin-based proximity assays.

**Accession Number:** Q9UMX0

**Entrez Gene ID:** UBQLN1

## Protein Sequence

```
MSHHHHHHGSLEVLFGPSPGCGRFQQQLEQLSAMGFLNREANLQALIATGGDINAAIERLLGG  
SGGSGRFQQQLEQLSAMGFLNREANLQALIATGGDINAAIERLLGGSGGSGRFQQQLEQLSAM  
GFLNREANLQALIATGGDINAAIERLLGGSGGSGRFQQQLEQLSAMGFLNREANLQALIATGG  
DINAAIERLLGS
```