

MATERIAL DATA SHEET

Recombinant Human Tetra-Ubiquitin (K63-linked) Rhodamine 110

Cat. # UC-355

Linkage specific poly-Ubiquitin chains may be used as a substrate for *in vitro* reactions with deubiquitinating enzymes ("DUB's") that cleave the peptide or isopeptide linkage between adjacent Ubiquitin molecules. K63-linked tetra-Ubiquitin chains are manufactured using recombinant wild-type human Ubiquitin and linkage-specific enzymes. The use of purely enzymatic techniques avoids the potential for contaminating synthetic intermediates. This fluorogenic substrate is intended for use with deubiquitinating enzymes that are unable to use mono-Ubiquitin-Rh110 (Catalog # [U-555](#)) as a substrate, or enzymes with activity that is stimulated by poly-Ubiquitin chains. The substrate consists of a K63-linked tetra-Ubiquitin chain with a single rhodamine attached to the C-terminus of the proximal Ubiquitin.

Product Information

Quantity:	50 µg
MW:	35 kDa
Source:	<i>E. coli</i> -derived Accession # P0CG47
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 7.0, 50 mM NaCl
Purity:	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use:	K63-linked tetra-Ubiquitin Rhodamine 110 is ideal for use in assays requiring fluorescent detection of deubiquitinase activity. Optimal fluorescence at pH 8.0 is monitored with excitation and emission wavelengths of 485 nm and 535 nm, respectively. Reaction conditions will need to be optimized for each specific application. We recommend an initial concentration of 0.1-1 µM.
Storage:	Protect from light. Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">• 12 months from date of receipt, -70 °C as supplied.• 3 months, -20 to -70 °C under sterile conditions after opening.

Literature

References:

For research use only. Not for use in humans.