

Ub-TAMRA Reference Standard  
Cat. # DU0121

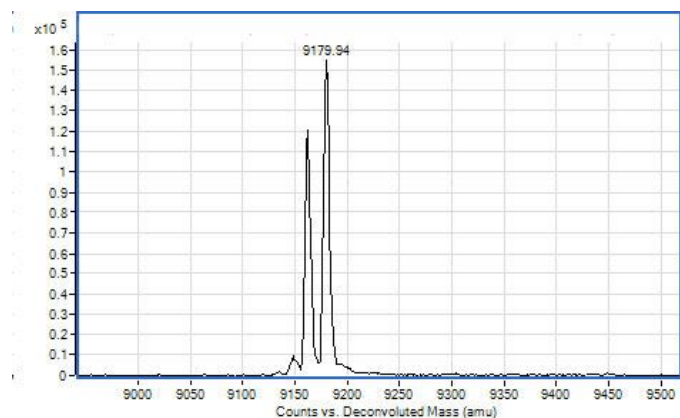
**Background:** LifeSensors's diubiquitin substrates represent a new class of substrates for the continuous fluorescent measurement of true isopeptidase activity. The C-terminus of wild type ubiquitin is conjugated via an isopeptide bond to lysine11, 48, or 63 of a second ubiquitin molecule with the resultant diubiquitin forming an internally quenched fluorescent FRET pair (IQF). Each ubiquitin is labeled with a single molecule of either a fluorescent reporter (i.e. TAMRA) or a highly efficient quenching dye. Cleavage of the IQF DiUb by deubiquitylases leads to separation of the fluorophore from quencher and subsequent increase in observed fluorescence.

The ubiquitin-TAMRA reference standard can be used to optimize and calibrate the performance of individual plate readers (or fluorometers) for measurement of the rates of hydrolysis of our IQF-DiUb by DUBs

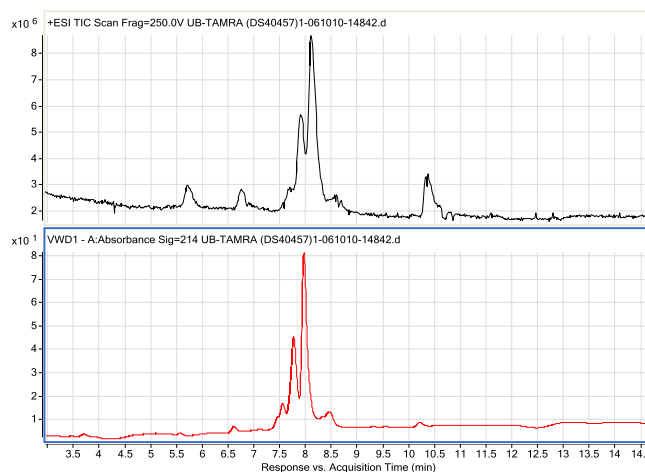
- Application:**
- Determine optimal filter, gain, and attenuation parameters for achieving maximal signal to background ratios for IQF-DiUb substrates
  - Determine calibration curves for converting RFU to molar concentrations

**Product Information**

<b>Purity:</b>	≥ 90% by RP-HPLC
<b>Molecular Weight:</b>	9,161.5/9179.5 Da
<b>Physical State:</b>	Liquid, 50mM Mes, pH6
<b>Quantity:</b>	25µg at 40µM
<b>Storage:</b>	4°C



LC-MS



RP-HPLC

All products are for research use only • not intended for human or animal diagnostic or therapeutic uses  
Copyright © 2009 LifeSensors, Inc. All Rights Reserved