

**MATERIAL DATA SHEET****Di-Ub (K48-linked) FRET TAMRA Pos3**  
**Cat. # UF-230**

Linkage specific diubiquitin is a substrate for enzymes that cleave the isopeptide linkage between two ubiquitin molecules. These FRET-based DUB substrates with isopeptide bonds between ubiquitin moieties are superior to gel densitometry assays. Since DUBs recognize and cleave substrates with specific steric conditions, each substrate varies in the position of the fluorophore and quencher and must be empirically tested for individual enzymes.

**Product Information**

<b>Quantity:</b>	50 µg
<b>Stock:</b>	X mg/ml (X µM) in 50 mM Hepes pH 7.5, 150 mM NaCl, 2 mM DTT Concentration varies with lot number.
<b>MW:</b>	17 kDa
<b>Purity:</b>	> 95% by SDS-PAGE

**Use & Storage**

<b>Use:</b>	Typical substrate concentrations range from 100-500 nM and typical enzyme concentrations range from 0.5-10 nM but depend on specific assay conditions and method of detection. Recommended assay buffer is 50 mM Hepes pH 7.5, 150 mM NaCl, 2 mM DTT. Fluorescence can be monitored using Ex544nm and Em572 nm wavelengths.
<b>Storage:</b>	Store at -80°C. Avoid multiple freeze/thaw cycles.

**Literature**

<b>References:</b>	Buchberger A., <i>et al.</i> (2002) <i>Trends. Cell. Biol.</i> <b>12</b> :216-221 Cook W.J., <i>et al.</i> (1992) <i>J. Biol. Chem.</i> <b>267</b> :16467-16471 Fischer R.D., <i>et al.</i> (2003) <i>J. Biol. Chem.</i> <b>278</b> :28976-28984 Tenno T., <i>et al.</i> (2004) <i>Genes to Cells.</i> <b>9</b> :865-875 Varadan R., <i>et al.</i> (2002) <i>J. Mol. Biol.</i> <b>324</b> :637-647 Varadan R., <i>et al.</i> (2004) <i>J. Biol. Chem.</i> <b>279</b> :7055-7063
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