Lot # XXXXX

BostonBiochem

MATERIAL DATA SHEET

Hexa-Ub/Ub6 WT Chains (K63-linked)
Cat. # UC-317

With a predicted molecular weight of 52 kDa, hexaubiquitin chains are composed of six ubiquitin monomers that are covalently linked through isopeptide bonds, which typically form between a lysine residue of one ubiquitin molecule and the C-terminal glycine residue of another ubiquitin molecule. Each human ubiquitin monomer is 76 amino acids (aa) in length and shares 96% and 100% aa identity with yeast and mouse ubiquitin, respectively. Seven of the 76 aa in ubiquitin are lysine residues that can participate in poly-ubiquitin chain formation. Linkage through specific lysine residues is thought to serve as a signal that affects protein degradation, signaling, trafficking, and other cellular processes. Linkage specific hexaubiquitin can be used to investigate the mechanism of binding and recognition by E1 or E2 enzymes, deubiquitinating enzymes, E3 ligases, the proteasome or other proteins that contain Ubiquitin-Associated domains (UBAs) or Ubiquitin-Interacting Motifs (UIMs). This product is formed with wild-type ubiquitin and linkage-specific enzymes.

Product Information	
Quantity:	25 µg, lyophilized powder
Solubility:	Reconstitute at 2 mg/ml in aqueous buffer
Purity:	> 90% by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie Blue stain
MW:	52 kDa

Use & Storage	
Use:	Ubiquitin chains vary in length, linkage, and function. K63-linked hexaubiquitin chains are ideal for investigating ubiquitin-binding proteins and as substrates for ubiquitin-specific isopeptidases. Reaction conditions will need to be optimized for each specific application. IMPORTANT: Heating this product in SDS-PAGE buffer or terminating reactions containing this product with heated SDS-PAGE buffer could lead to unexpected, high apparent molecular weight banding or smearing on gels that is not representative of product purity. For optimal results, we recommend incubation in SDS-PAGE buffer + DTT at <40 °C for 20 minutes prior to gel electrophoresis.
Storage:	Solubilized solution at –20°C. Avoid multiple freeze/thaw cycles.

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Literature

References:

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