

# Recombinant Full Length Human Ubiquitin Protein, HA tagged, Vinyl Methyl Ester Labeled

**Cat. No.** Ubiquitin-10HFL    **Lot. No.** (See product label)

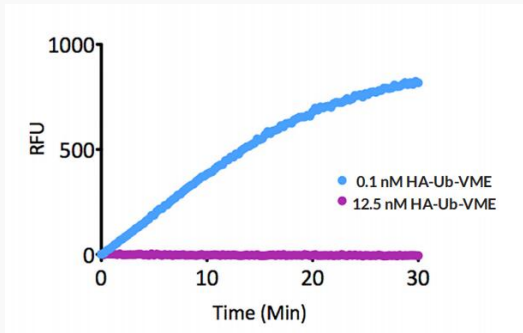
## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | This product consists of a full-length human, mature ubiquitin polypeptide (amino acids 1-76), expressed in E. coli with a c-terminal warhead (Vinyl Methyl Sulfone) and an N-terminal HA-Tag.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>ProteinLength</b>    | 1-76aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Description</b>      | Ubiquitin is a small (8.5 kDa) regulatory protein that has been found in almost all tissues of eukaryotic organisms. Ubiquitination can affect proteins in many ways; it can signal for their degradation via the proteasome, alter their cellular location, affect their activity, and promote or prevent protein interactions. Removal of ubiquitin from a substrate protein occurs via deconjugating enzymes, of which there are nearly 100 known enzymes with various linkage specificities. HA-Ubiquitin-Vinyl Methyl-Sulfone is a potent, irreversible, and specific inhibitor of deubiquitinating enzymes (DUBs) based on a C-terminal electrophilic Vinyl Sulfone group. It targets three of the four major DUB families: UCH (Ubiquitin c-terminal hydrolases), USP (Ubiquitin Specific Proteases), OTU (Ovarian Tumor Proteases), and MJD (Machado-Josephin domain proteases) while JAMM metalloproteases are not inhibited. |
| <b>Tag</b>              | HA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                          |                                                                                                                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conjugation/Label</b> | Vinyl Methyl Ester                                                                                                                                                                                          |
| <b>Molecular Mass</b>    | 10.1 kDa                                                                                                                                                                                                    |
| <b>Purity</b>            | >97% by LCMS                                                                                                                                                                                                |
| <b>Usage</b>             | Reaction conditions will need to be optimized for each application. We recommend an initial HA-Ubiquitin-VME concentration of 1-5 $\mu$ M.                                                                  |
| <b>Applications</b>      | HA-Ub-Vinyl Methyl ester can be used for activity profiling experiments and using the HA-Tag conveniently for Immunoprecipitations in search for new or novel enzymes reacting with the c-terminal warhead. |
| <b>Notes</b>             | For Research Use Only, Not For Use In Humans.                                                                                                                                                               |
| <b>Storage</b>           | At -80 centigrade, Avoid multiple freeze/thaw cycles.                                                                                                                                                       |
| <b>Storage Buffer</b>    | 50mM MES pH 6.0, 100mM NaCl                                                                                                                                                                                 |
| <b>Concentration</b>     | 400 $\mu$ M, 4.0 mg/mL                                                                                                                                                                                      |
| <b>Kinetic Activity</b>  |  <p>UCHL3 activity with Ubiquitin-AMC measured in the presence of 15.0 nM and 0.1</p>                                   |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

nM HA-Ubiquitin Vinyl Methyl Ester.

Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA