

Ubiquitin-Vinyl Sulfone

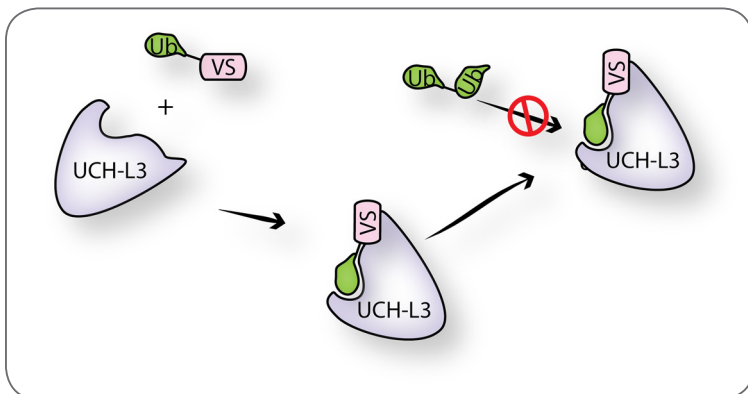
Cat. No. SBB-PS0032
Lot. No. 172440032



South Bay Bio

Ubiquitin-Vinyl Sulfone

Ubiquitin is a small (8.5 kDa) regulatory protein that has been found in almost all tissues of eukaryotic organisms. The addition of ubiquitin to a substrate protein is called ubiquitination or ubiquitylation. 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. 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 Sulfone). Ubiquitin-Vinyl Sulfone is a potent, irreversible, and specific inhibitor of deubiquitinating enzymes (DUBs) based on a C-terminal electrophilic Vinyl Sulfone group. Ub-Vinyl Sulfone can be used for activity profiling experiments and determining DUB inhibitor specificity. 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. Reaction conditions will need to be optimized for each specific application. We recommend an initial Recombinant Human Ubiquitin Vinyl Sulfone concentration of 1-5 μ M.



For Research Use Only, Not For Use In Humans.

Product Information

Quantity: 50 μ g **Molecular Weight:** 8.6 kDa

Concentration: 250 μ M, 2.15 mg/mL

Purity: >97% by LCMS

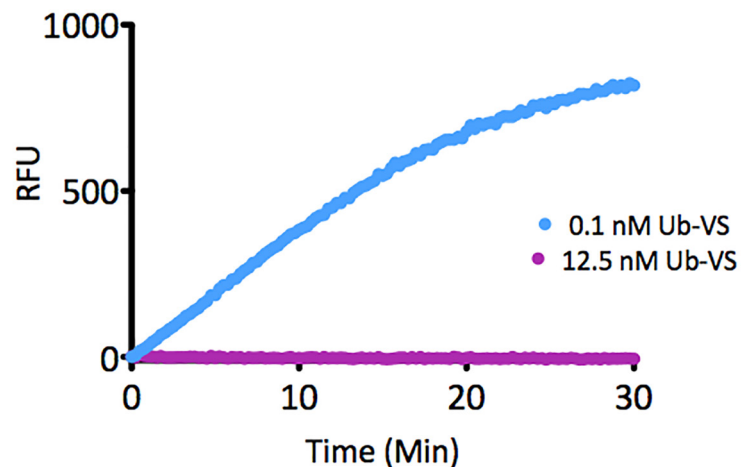
Storage Buffer: 50mM MES pH 6.0, 100mM NaCl

Storage: -80C, Avoid multiple freeze / thaw

Usage: Typical experimental concentration 1-5 μ M.

Quality Control and Performance Data

UCHL3 + Ub-AMC + Ubiquitin-Vinyl Sulfone



Kinetic Activity. UCHL3 (SBB-DE0023) activity with Ubiquitin-AMC (SBB-PS0043) measured in the presence of 12.5 nM and 0.1 nM Ubiquitin Vinyl Sulfone.

www.southbaybio.com

Contact:
info@southbaybio.com

5941 Optical Ct, Suite 229
San Jose, CA 95138 USA

Ubiquitin-Vinyl Sulfone

Cat. No. SBB-PS0032
Lot. No. 172440032



South Bay Bio

References

- 1) Borodovsky et al. 2001, 20, 5187.
 - 2) Xu et al. RSC Adv 2016, 6, 47926.
 - 3) Tong, X. et al. (2012) J. Biol. Chem. 287:25280.
Galardy et al. Methods in Enzymology 2005, 399, 120.
-

For Research Use Only, Not For Use In Humans.

www.southbaybio.com

Contact:
info@southbaybio.com

5941 Optical Ct, Suite 229
San Jose, CA 95138 USA