## Bz-FVR-AMC

| Cat. No.:          | HY-D1634  |  |
|--------------------|---|--|
| CAS No.:           | 88899-22-3  |  |
| Molecular Formula: | $C_{37}H_{43}N_7O_6$  |  |
| Molecular Weight:  | 681.78  |  |
| Target:            | Cathepsin   |  |
| Pathway:           | Metabolic Enzyme/Protease   |  |
| Storage:           | Please store the product under the recommended conditions in the Certificate of Analysis. |  |

| BIOLOGICAL ACTIVITY |  |  |
|---------------------|--|--|
| Description         | Bz-FVR-AMC is a fluorogenic substrate for procathepsin with a k <sub>cat</sub> /K <sub>m</sub> value of 1070 mM <sup>-1</sup> s <sup>-1</sup> . The high concentration of BZ-FVR-AMC inhibits the substrate <sup>[1][2]</sup> .  |  |
| In Vitro            | <ul> <li>Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).</li> <li>Processing and activation of procathepsin S<sup>[2]</sup>: <ol> <li>Autocatalytic activation of procathepsin S was studied by incubation (final concentration 1-5 μM) at 37 ⊠ in 0.5 mL of the appropriate buffer containing 2.5 mM dithiothreitol.</li> <li>Aliquots of 10 μl were taken from the reaction mixture at the times indicated and mixed with 2.5 ml of substrate solution (10 μM Bz-FVR-AMC in 0.1 M phosphate buffer, pH 6.5, containing 1 mM EDTA (HY-Y0682) and 0.1% (w/v) polyethylene glycol 6000).</li> <li>Fluorescence of the released AMC was then monitored continuously for 1 min in a pectrofluorimeter at excitation and emission wavelengths of 370 and 460 nm.</li> <li>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</li> </ol> </li> </ul> |  |

## REFERENCES

[1]. Vasiljeva O, et al. Recombinant human procathepsin S is capable of autocatalytic processing at neutral pH in the presence of glycosaminoglycans. FEBS Lett. 2005 Feb 14;579(5):1285-90.

[2]. Vasiljeva O, et al. Recombinant human cathepsin H lacking the mini chain is an endopeptidase. Biochemistry. 2003 Nov 25;42(46):13522-8.

Caution: Product has not been fully validated for medical applications. For research use only.

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**Product** Data Sheet

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