

## **Product Information Sheet**

Product Name: 520 MMP FRET Substrate III

Sequence: QXL<sup>TM</sup>520 -Pro-Leu-Gly-Cys(Me)-His-Ala-D-Arg-Lys(5-FAM)-NH<sub>2</sub><sup>1</sup>

Catalog Number: AS-60570-01

MW: 1745.7

HPLC Purity: > 95%

Storage: The product is stable for 1 year at -20°C.

## Features and Biological Applications:

This 5-FAM/QXL<sup>TM</sup>520-based FRET substrate is a sensitive and efficient reagent for assaying MMP activity. It can be cleaved by MMP-1, 2, 8, 9, 12, and 13.

This FRET peptide substrate incorporates QXL<sup>TM</sup>520, the best quencher available to pair with 5-FAM. When the peptide is intact, the fluorescence of 5-FAM (donor) is quenched by QXL<sup>TM</sup>520 ("dark" acceptor) through fluorescence resonance energy transfer (FRET). Upon cleavage by MMPs into two separate fragments, the fluorescence of 5-FAM is recovered and can be detected at the emission wavelength of 520±20 nm, with excitation wavelength of 490±20 nm.

Prepare 1 mM DMSO stock solution and dilute in an appropriate assay buffer at a concentration range of 1 to 100  $\mu$ M. The peptide concentration needs to be optimized depending on your experimental conditions.

## References

1. Berman, J. et al. J. Biol. Chem. 267, 1434 (1992).

For in vitro research use only