

## **Product Information Sheet**

Product Name: 520 MMP FRET Substrate XI

Sequence: 5-FAM-Pro-Cha-Gly-Nva-His-Ala-Dap(QXL<sup>TM</sup>520)-NH<sub>2</sub><sup>1;2</sup>

Catalog Number: AS-60578-01

MW: 1568.8

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, 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. Lauer-Fields, JL. et al., Biol. Chem. 383, 1095 (2002).
- 2. Lauer-Fields, JL. et al., *Biochemistry* 40, 5795 (2001).

For in vitro research use only