

Product Information Sheet

Product Name: 520 MMP FRET Substrate VIII

Sequence: QXLTM520-Arg-Pro-Lys-Pro-Leu-Ala-Nva-Trp-Lys(5-FAM)-NH₂^{1;2}

Catalog Number: 60575-01

MW: 1943.20

HPLC Purity: > 95%

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

Features and Biological Applications:

This 5-FAM/QXLTM520-based FRET substrate is a sensitive and efficient reagent for assaying MMP activity. It can be cleaved by MMP-7, 12, and 13.

This FRET peptide substrate incorporates QXLTM520, the best quencher available to pair with 5-FAM. When the peptide is intact, the fluorescence of 5-FAM (donor) is quenched by QXLTM520 ("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 μ M. The peptide concentration needs to be optimized depending on your experimental conditions.

References

- 1. Bickett DM.et al., Ann.N.Y.Acad.Sci. 732, 351 (1994).
- 2. M. Finch-Arietta, M. et al., Agents Actions 39 Spec No, C189 (1993).

For in vitro research use only