



Product Information Sheet

Product Name:	520 MMP FRET Substrate XII
Sequence:	5-FAM-Arg-Pro-Lys-Pro-Tyr-Ala-Nva-Trp-Met-Lys(QXL TM 520)-NH ₂ ^{1:2}
Catalog Number:	60579-01
MW:	2126.9
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-1, 2, 3, 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 µM. The peptide concentration needs to be optimized depending on your experimental conditions.

References

1. Bremer, C. et al., *Acad.Radiol.* 9 Suppl 2, S314 (2002).
2. Nagase, H. et al., *J.Biol.Chem.* 269, 20952 (1994).

For *in vitro* research use only