



## Product Information Sheet

---

Product Name:	520 MMP FRET Substrate X
Sequence:	QXL <sup>TM</sup> 520 -Pro-Leu-Ala-Tyr-Trp-Ala-Arg-Lys(5-FAM)-NH <sub>2</sub> <sup>1,2</sup>
Catalog Number:	60577-01
MW:	1853.62
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-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 µM. The peptide concentration needs to be optimized depending on your experimental conditions.

### References

1. Aschi, M. et al., *J.Comput.Aided Mol.Des* 16, 213 (2002).
2. Netzel-Arnett, S et al. *Anal.Biochem.* 195, 86 (1991).

For *in vitro* research use only