



## Product Information Sheet

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Product Name:	520 MMP FRET Substrate 1
Sequence:	5-FAM-Pro-Leu-Gly-Leu-Dap(QXL <sup>TM</sup> 520)-Ala-Arg-NH <sub>2</sub> <sup>1;2</sup>
Catalog Number:	AS-60572-01
MW:	1562.67
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, 7, 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 µM. The peptide concentration needs to be optimized depending on your experimental conditions.

### References

1. Knight, CG. et al. *FEBS Lett.* 296, 263 (1992).
2. Netzel-Arnett, S et al. *Anal.Biochem.* 195, 86 (1991).

For *in vitro* research use only